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An Address.¹

THE FOUNDER OF THE BRITISH MEDICAL ASSOCIATION: HIS LIFE AND AIMS.²

By H. Simpson Newland, C.B.E., D.S.O., M.S. (Adelaide), F.R.C.S. (Eng.),

Retiring President, South Australian Branch of the British Medical Association.

You are all familiar with the old saw: "It is a wise child that knows its own father." It is just because I am presumptuous enough to suppose many of you to be as ignorant of our founder as I was before I began the preparation of this address that I have chosen for my subject his life and aims. I must confess, however, that my new-born admiration for Sir Charles Hastings is somewhat tempered by the fact that he was also the originator of the presidential address. From this penance the earlier occupants of this chair were, thanks to a happy, but alas! extinct ordinance, mercifully absolved.

Charles Hastings was born at Ludlow, in Shropshire, on January 11, 1794. He was the sixth son of James Hastings, rector of Martley, in Worcestershire, who belonged to the old Worcestershire county family which counted Warren Hastings as one of its most distinguished sons.

Concerning this James Hastings the following facts are of interest. He was himself a centenarian and the father of a centenarian. He was rector of Martley on his own presentation for 60 years. He died in July, 1856, having attained the age of 100 years, 6 months and 4 days. His eldest daughter, Joanna, emulated the paternal example. She was born on March 14, 1782, and died on March 12, 1886, thus failing by two days to complete her 104th year. She survived her fourteen brothers and sisters and kept her faculties clear to the day of her death.

Charles Hastings appears to have created a very good impression quite early in his existence, as the following incident shows. Early in the year 1794, a Mrs. Willes travelled by carriage from Shropshire to London. She was daughter-in-law to Chief Justice Willes and her destination was the "tall house near Lincoln's Inn," then inhabited by him, though celebrated by Pope in other times as the residence of a great peer and statesman. From that house Mrs. Willes wrote to a lady friend in Worcestershire:

"On our way up we changed horses at Ludlow and I was able to go and see Mrs. Hastings. I found her looking charming in a dressing gown and nursing in her arms what I really believe is the prettiest baby I ever saw." Pretty babies do not always retain their good looks, but Charles Hastings did so, for his portrait on the cover of the *British Medical Journal* shows that he was a handsome man.

He received his early education at the Grammar School at Martley. He preferred field sports to his books and was very fond of animals. In the words

of one of his sisters, "he was always nursing sick chickens." When 16 years old he was apprenticed to Mr. Jukes and Mr. Watson, two surgeons practising at Stourport. It is evident that he at once "found himself," for in the short space of two years his ability and diligence led his friends to support his candidature for the position of house surgeon to the Worcester Infirmary, shortly to become vacant. After walking the hospitals in London for a few months he was elected house surgeon to the Worcester Infirmary by one vote when only in his nineteenth year. His opponent, a Mr. Lewis, was a grown man and a Member of the College of Surgeons. So impressive was this feat that the late Lord Lyttelton remarked that it seemed incredible a boy of that age could not only compete for, but gain, such an appointment.

It is believed that his success was largely owing to the vigour with which he rode about the country canvassing the subscribers, whom he impressed with his earnestness and intelligence. During the contest he showed an admirable trait, which distinguished his character throughout his life. His opponent was a Roman Catholic and in 1812 religious feeling ran high. Hastings was urged to raise the sectarian issue and it is a great testimony to his character that he resolved to stand or fall on his professional merits only and that he refused to yield to the solicitations of his family and friends. It is recorded that he not only performed the duties of his new post most ably, but that he started a pathological museum. He also found time for research work. Stimulated by Dr. Wilson Philip, a physician and physiologist on the staff of the Infirmary, he conducted a number of experiments on the cerebral, spinal and ganglionic systems, with especial reference to the nervous mechanism of the stomach and the functions of the vagus nerve.

In the year of Waterloo he matriculated at Edinburgh, where he attended the lectures of Gregory (of powder fame), Munro and Duncan, as well as those of Hope in chemistry and Gordon in physiology. Although his health was far from good, he made an investigation to determine whether the arteries, veins and capillaries possessed independent contractile power, a matter then in much dispute. The microscope was used by him in this research and he is said to have been the only student of the University of Edinburgh who possessed one. He also showed a very practical interest in sanitation, for, while merely a clinical clerk, he was instrumental in having a committee appointed to inquire into the cleanliness of and diet at the Royal Infirmary. This zeal for reform was not likely to increase his popularity with his elders. However, he was elected President of the Royal Medical Society and communicated to it the results of his researches on the physiology of the blood vessels.

His M.D. thesis bore the title, "*De vi contractile vasorum.*" His delicate health prevented him from applying for the chair of physiology in the University. Indeed, the precarious state of his health at that time was common knowledge.

¹ Delivered at the Annual Meeting of the South Australian Branch of the British Medical Association on June 24, 1920.

² This address has been very largely composed of abstracts from biographical notices and references published in the *British Medical Journal*.

"Ah! Hastings," the students would say, "he is a very clever fellow, but he cannot live; he will be dead of pulmonary disease in a few years."

It was probably the milder climatic conditions of Worcester which influenced him in his decision to commence practice there as a consulting physician.

In 1818 he was appointed physician to the Infirmary. Two years later, having possibly been attracted to the subject owing to the weakness of his own organs, he published "A Treatise on Inflammation of the Mucous Membrane of the Lungs, Including an Account of Experimental Enquiry into the Action of the Blood Vessels," and an essay entitled "An Enquiry into the Nature of Inflammation."

Success in practice came early. A letter from Dr. Wilson Philip, who relinquished practice in Worcester soon after Hastings started there, contains the words: "I heard from Malden the other day. He says that, on the whole, he does not complain; but he also says that you get the lion's share of the practice."

So insistent were the calls on his time and energy that, to employ words which were probably his own, "he was sensibly impressed with the baneful influence upon his mind of the tendency to degenerate into a mere receiver of fees and of the science to sink into the trade of the profession." This temptation did not die with Hastings. It assails us just as fiercely to-day. May the example of his life enable us to withstand the mammon of unrighteousness as nobly as he did. Hastings went on to say: "On looking round he could find no institution in the provinces to engage the attention of a cultivator of medical science. True it was that many great stars had shone in the provinces and had thrown much light upon medicine, but the profession as a body was disjointed and no attempt had ever been made to give to provincial medicine a local habitation and a name."

His first attempt to supply this want was the foundation in 1828, with the help of some friends, of the *Midland Medical and Surgical Reporter*. The publication met with much success and events soon showed that there was a widespread desire that members of the profession residing in the provinces should unite themselves into an association, friendly and scientific, and that this association should have for its main object "the diffusion and increase of medical knowledge in every department of science and practice."

With the assistance of Dr. Barlow, of Bath, Hastings drew up a prospectus which deserves to be treasured in our memories as the first declaration of the principal objects of the Association.

Those objects were:

- (1) Collection of useful information, whether speculative or practical, through original essays, or reports of provincial hospitals, infirmaries or dispensaries or of private practice.
- (2) Increase of the knowledge of the medical topography of England, through statistical, meteorological, geological and botanical inquiries.
- (3) Investigation of the modifications of endemic and epidemic diseases in different situations and at various periods, so as to

trace, so far as the present imperfect state of the art will permit, their connexions with peculiarities of soil or climate, or with the localities, habits and occupations of the people.

- (4) Advancement of medico-legal science, through succinct reports of whatever cases may occur in provincial courts of judicature.
- (5) Maintenance of the honour and respectability of the profession generally in the provinces, by promoting friendly intercourse and free communication of its members and by establishing among them the harmony and good feeling which ought ever to characterize a liberal profession.

It will thus be seen that the British Medical Association was provincial in its conception. In its development it has become Imperial.

The British Medical Association was founded, in fact, though not in name, at a meeting held at the Worcester Infirmary on July 19, 1832, to which all legally qualified men practising in the provinces were invited. It was resolved to form the "Provincial Medical and Surgical Association," which should hold an annual meeting in the various principal towns of the Kingdom. Many of us connect Worcester with a famous make of china or with a still more famous brand of sauce. I hope the members of this Branch will remember that the town has a third and chief claim to fame: that it was the birthplace of the greatest association of medical men in the history of the world.

Dr. Hastings, then in his thirty-ninth year, delivered the inaugural address to the meeting and indicated directions in which the Association might immediately proceed to add to medical knowledge. He exhorted his hearers most wisely to "be vigilant in the collection of facts and cautious in drawing conclusions from them." He concluded his address with the following peroration:

Gentlemen, you will at any rate admit that the objects I have thus hastily introduced to the notice of the meeting are worthy of deep meditation. The contemplation of them appears to me, indeed, to open to us a vast and unbounded prospect and to beget high and lofty thoughts of our future proceedings.

I may be sanguine in my expectations, but I cannot help indulging the gratifying, the cheering, the delightful thought that if we engage in this undertaking, as we are bound to do, by the obligations which our profession imposes upon us, with the zeal and alacrity of men anxious for the good of mankind, the Association must be of some use; must have a direct tendency to extend the empire of knowledge and to increase our power over disease. *Valeat quantum valere debet.*

Prophetic words! Imperial in its scope as the Association has become, far, far beyond the expectations of its founder, let us strive that the aims which he laid down, be pursued in the same nobility of spirit.

But Hastings not only recognized that the Association might exercise a great influence in the advancement of clinical and scientific medicine, but was equally alive to the material needs of the profession. In the address from which I have already quoted he said:

It is likewise admitted on all hands that the organization of the profession which obtains is not what it ought to be, for the whole system of medical polity in this country is both defective and erroneous.

He went on to say:

If the profession were constituted as it ought to be and as reason and sound principles dictate, the harmony that would be thus established among the several departments could not fail to prove a direct means of their co-operating more cordially and efficiently in extending the science and improving the practice.

The Association at once turned its attention to questions affecting the public health and the status of the profession. The efforts of the Association in the latter direction were only, after a struggle lasting over 20 years, crowned with success. The *Medical Act* was enacted in 1858 and Hastings was one of the first members nominated by the Crown to represent it on the General Medical Council. This *Medical Act*, with some amendments, regulates the legal aspects of the profession and makes the great profession of medicine in the United Kingdom a tolerably coherent whole. Prior to this, the state of medical legislation was nothing less than chaotic. It was hard in some respects to say who was legally qualified and who was not. For instance, the Scotch degrees were recognized in the provinces, but not in London. It was doubtless an exaggeration, but it was once affirmed that, while the Queen's physician, Sir James Clark, an Edinburgh graduate, could lawfully prescribe for Her Majesty at Windsor, he broke the law when he did so in London. That the Association was successful in evolving order out of chaos was in chief measure due to the unflinching courage and tenacity of Sir Charles Hastings.

The gratitude of the members of the Association to Sir Charles Hastings for his distinguished services was shown in many ways. In 1839 his portrait in oils, by R. B. Faulkner, was presented to his wife. The portrait on the cover of the *British Medical Journal* is reproduced from an engraving of the oil painting by the well-known firm of Agnew's. I hope to be successful in obtaining an example of this engraving to hang in this Hall.

In 1849, six years after resigning the position of Secretary, he was elected President of the Association. As Honorary Secretary he had given the most devoted attention, strenuous labour and unremitting care to the interests of the Association. Occupied by day in his constantly increasing practice, he gave his evenings and not a little of his nights to correspondence and literary work. He edited the *Transactions* which preceded the *British Medical Journal*. As the Association rapidly grew, he obtained the assistance of a paid secretary, but the management remained virtually in his hands and to him we owe, not only the foundation, but the development, influence and character of the Association.

The honour of knighthood was conferred upon him in 1850. Hastings was not only interested in medicine. He was one of the founders of the Worcester Natural History Society and his name is in the list of the original members of the British Association for the Advancement of Science. He attended its second meeting at Oxford in 1832. He had visited Oxford many years before and was present in the Sheldonian Theatre when the degree of D.C.L. was conferred on Warren Hastings amid great enthusiasm. Many years later the same distinguished honour was conferred on himself. At a dinner on that occasion, held in the

hall of University College, in acknowledging the toast of his health, he said that great as was the honour done to him by the University, he felt it all the more deeply as, many years before, he had been a witness to the same ceremony when the most illustrious of his name and race had found himself consoled for the seven years' persecution which he had received as a recompense for saving India.

Hastings prompted the formation of a natural history museum at Worcester and it had his unceasing care. Sir Richard Owen once visited the Museum and, struck with the representation of the past and present animal life of the country, he remarked: "This is just what a provincial museum should be. You cannot emulate metropolitan or other great collections, but you can give an illustration of the natural history of the district, which is most valuable, and that is just what you have done here."

The museum has been named the Hastings Museum and contains a marble bust by Brock, which was presented to the City of Worcester in 1882.

It should also be mentioned that he was a geologist of repute. Owing to his intimate acquaintance with the conformation of his own county, he was able to put Sedgwick and Murchison on the track of investigations which led to remarkable advances in the science of geology.

Hastings died after a long illness on July 30, 1866, in the seventy-third year of his age. His deeds speak for themselves and live after him.

Some conception of his character will already have been gained from the account I have given of his life. Soon after his death an old and distinguished friend in a public address said: "He was a man of an eminently friendly disposition," an eulogy which was amplified as follows by one of his own blood many years later: "That friendliness of character making him hospitable, kindly, generous, amiable to all around him, tolerant of diverse opinions, sedulously attentive to even the minor courtesies of life, blossomed out as it were in the creation of a great society which should bind his profession together in amity and honour and increase its value to mankind."

I have already shown that Hastings desired that the efforts of the Association should be expended on two main objects for the benefit of its members.

- (1) To promote the study and advancement of medical science.
- (2) To ameliorate the conditions of medical practice, by means of medico-political activity, by organization and by defence.

How are we in this Commonwealth carrying out the ideals of our founder?

In a scientific sense, so far as general medicine and surgery are concerned, the monthly meetings of each State Branch present members with an opportunity, if they so wish, of contributing to the advance of medical science.

The increasing tendency to specialize in the larger State capitals has led, I note it with regret, to a tendency for independent societies, composed of consultants or specialists in some branch of medical science, to spring up. When there is a call for the foundation of any such society, it is quite possible, and in my opinion very desirable, that it should be a constituent part of the British Medical Association.

It is quite competent for a State Branch to form special sections of medicine, surgery, pathology, electro-therapy and so on, on the lines of the Royal Society of Medicine of London. In this way the section concerned would gain prestige by being part of a great Association and the Branch, in turn, would provide a means for the gratification of the special scientific and clinical tastes of certain of its members. A section of surgery in a Branch or a Division might be formed in the first instance by writing to the members who specialized in surgery or who were members of the surgical staff of a general hospital, to constitute it. Subsequent candidates for membership, who must necessarily be members of the British Medical Association, would be elected by the members of the section themselves. The section would, of course, elect its own officers and generally conduct its own particular business.

Should an annual meeting of the Association eventually take the place of the triennial Australasian Medical Congress, the members of the surgical sections of the several States would form, so to speak, a Federal surgical section.

In this short summary of the procedure which has been suggested, I have selected surgery as an example, but it applies equally to every specialty. It could probably be arranged that the transactions of each section should be grouped and published in *The Medical Journal of Australia*. Perhaps we should then hear fewer of the ill-timed gibes against that journal, which, notwithstanding great difficulties, due to its foundation just before the war, has served the members of the Association well. When I hear a member tilting against the journal, I feel tempted to ask him and I have asked: "What are you doing to help it?" I shrewdly suspect that the service rendered is, not seldom, in inverse proportion to the volume of the complaint.

If the journal is to publish the transactions of the various sections, it will entail more expense, but members must realize that a medical journal is no exception to the rule that a good thing has to be paid for. The formation of special sections within the British Medical Association would be in conformity with the main object of the Association, as enunciated by Hastings, "the diffusion and increase of medical knowledge in every department of science and practice."

I have very briefly indicated how, in accordance with Hastings's ideals and with the growing needs of the present, the study and advancement of medical science might be promoted. It is now fitting to consider, quite shortly, how the medico-political and organizing activities of the Association may be employed to advance the more material interests of its members.

The activities of the Branches in Australia are unfortunately limited in certain directions under the present constitution. The Council in England is fully seized of the importance of extending the powers of Branches in the Dominions, in order that their aspirations for a fuller and unfettered development should be capable of realization.

A legislative solution of the difficulties that beset

us has not yet been discovered, but those in Great Britain who guide the destinies of this great Imperial Association are resolved that, "as the desires expressed by certain overseas Branches could not be met without the establishment of their practical independence, provision should, if possible, be made in the constitution of the Association, whereby Branches of the Association in the Dominions which desired independence might obtain it and be enabled to affiliate with the Association for such purposes as might be agreed upon in each individual instance."

The independence foreshadowed is not incompatible with Hastings's aims, for, as the Council in the mother country observes, "neither the activities, efficiency nor loyalty of the New South Wales Branch have in any way been prejudicially affected by the fact that the Branch is and has long been an incorporated body."

The institution of the Federal Committee was the outcome of a desire on the part of the Branches in the States of the Commonwealth for co-ordinated and united action of the profession in respect to questions involving the interests of all. No one who takes the trouble to study the records, can deny that the Federal Committee has cherished the honour and interests of those who practice medicine.

But while it behoves the Association to look after the general interests of the many, it is not less important, in material things as in matters of science, to consider and, if thought proper, to supply the needs of the few. This can be done by a policy of devolution. In this vast island continent, with an area greater than that of the United States of America, with a population less than that of the United States at the beginning of the 19th century, there is a great and ever-expanding field for the extension of the activities and influence of the Association. In the more closely settled parts of the continent, away from the immediate vicinity of the capital towns, matters of local concern will naturally often demand local, organized action on the part of medical practitioners whose interests are affected. New South Wales prior, I think, to the adoption of the new constitution of the Association in 1902, devised a scheme of devolution by forming what were termed "Local Associations" throughout the State. Possibly the same object could be achieved by the formation of divisions within a Branch. In this State the members of the Branch in the Mid-Northern area have wisely and with the full approval of the Branch Council, decided to combine for the purpose of organized action. Such a combination would form a division. The division would elect its own officers and generally exercise all the functions of a local medical society, with the additional and enormous advantage of being part of a powerful organization. Let us not forget that the Association was founded by Hastings primarily to help those who were cut off from the advantages accruing from residence in the great metropolitan centres. Some one has said that the ideal British Medical Association is an association dedicated to the proposition that medical men should help one another. As the years roll on the divisions are destined to multiply. Co-ordination between division

and Branch would be obtained by each division electing one or more representatives to serve on the Branch Council.

I have tried to indicate in the latter part of this address, first, how the advance of medical science and, second, how the organization of those practising it, may be aided by practical measures, both in keeping with our founder's ideals. If, in obeying the Biblical injunction to praise famous men, I have seemed to some to exaggerate the value of Hastings' services in founding and fostering the Association, while not admitting the impeachment, I can agree that Hastings builded better than he knew. When we survey in every land the Branches of the Association Hastings did so much to fashion, we are entitled to say of him, as was said of Christopher Wren, "*Si monumentum requiris, circumspice.*"

If, on the contrary, I have stimulated the interest of others and if I have, as I hope I have, aroused or confirmed in yet more a pride in their Association somewhat akin to that which prompted the proud old boast, "*Civis Romanus sum,*" then this address will not have been without its reward.

THE USE OF X-RAYS IN THE DIAGNOSIS OF THORACIC AFFECTIONS.¹

By Stanley Argyle, M.B., B.S. (Melb.),
Honorary Radiologist, Alfred Hospital, Melbourne.

You are all probably thoroughly familiar with X-ray examinations of the chest both by screen and plate and there can be little that is new that I can place before you.

However, in an experience of nearly fifteen years of this class of work, it is possible that I am more familiar with the limitations and pitfalls of radio-diagnosis than the majority of practitioners and, therefore, I have presumed to place these few notes before you more with the idea of arriving at a better understanding as to the actual values of X-ray appearances in the thorax than with the notion of imparting new methods or original discoveries.

May I say at the outset that I disapprove entirely of any diagnosis made entirely upon X-ray appearances? What we have to deal with both on the screen and on the plate is at best a collection of shadows of varying density and similar shadows are quite often thrown by very different pathological conditions. Therefore I regard it as a *sine qua non* that all patients sent for radiological examination should be accompanied by at least précis of the clinical history and signs and symptoms of the case. Where possible, it is still better if the physician or surgeon in charge can accompany his patient and confer with the radiologist before, during and after the examination. When the protean character of the cases sent to a radiologist for diagnosis are considered, it may perhaps be realized that it is not possible for him to be a universal specialist in all diseases, both medical and surgical. Although a good working knowledge of anatomy, physiology and pathology is essential, still the intimate acquaintance of the family doctor or

consultant with the details of the history of the case and with the relative importance of various symptoms, is often essential in arriving at an accurate explanation of the X-ray appearances. In other words, skiagraph provides only a portion, frequently an important portion, I admit, but still only a portion of the clinical picture upon which a sound diagnosis may be made.

In all X-ray examinations of the thorax the first great essential is a thorough knowledge of the appearances of the normal chest. But that is a truism you will say. I do not think so. I am satisfied that it is extremely difficult to find a truly normal chest in any adult over the age of thirty years, particularly in the case of individuals who have spent their lives in the precincts of a great city. Where the precise boundary lies between the normal and the pathological is the problem with which the radiologist is faced almost daily. Here, again, is emphasized the importance of the conference between the practitioner and the X-ray consultant in weighing the values of the signs, symptoms and X-ray appearances in any border-line case.

I have been much impressed with the extreme difficulty in discovering a normal condition of the lungs in any ex-member of the Australian Imperial Force and yet it is hard to believe that the conditions found must be regarded as pathological, though very definitely a departure from the normal.

Before passing on to consider the various thoracic conditions in detail, I should like to say a few words as to technique.

First as to position.—Where possible I make all screen examinations in the upright position, either sitting or standing. In the horizontal position small collections of fluid in the pleura are liable to be overlooked, more especially in hydro-pneumo-thorax.

Another important point in technique is the character of the rays used. Many details are liable to be overlooked if the rays used are too penetrative. Consequently I always use a comparatively soft tube, which gives on the screen a very black and white contrasty picture, with a moderate quantity of impulses.

Incidentally I might mention that the use of the Coolidge tube for screening is not without its dangers both to the patient and to the operator. An average milliampèreage of from 3.5 is the maximum that should be used for screening purposes.

An easily adjusted rectangular diaphragm is a very great advantage in all screen examinations of the chest. Many details that are quite invisible with an open aperture, are easily seen when a small beam of rays is used over a restricted area of lung. Both lungs should be carefully examined from apex to base with a small beam of light and the appearances of the lungs noted both in inspiration and expiration. The examination should be made antero-posteriorly, postero-anteriorly and obliquely. I do not use the true lateral view except in a few exceptional cases. Plates of the thorax should always be taken while the patient holds his breath. Most modern outfits will do this, especially when intensifying screens are used. In this matter it is quite astonishing to find

¹ Read at a Meeting of the Victorian Branch of the British Medical Association on July 7, 1920.

on looking back what excellent plates were taken with quite prolonged exposures in chest cases.

Pulmonary Tuberculosis.

The classical appearances by which a diagnosis of phthisis is made from a screen examination are:—

- (1) Restricted diaphragm movements.
- (2) Lessened translucency of the whole or portions of the lung, both at rest and on deep inspiration.
- (3) Irregular patches of increased density through the lung or one or other of the lobes.
- (4) The presence of an unusually small, or what is known as the hanging, heart.

Now any or all of these appearances may be present in a case and yet the disease may not be phthisis. If, however, these appearances are found in a case in which the clinical findings point to the presence of tuberculosis, the diagnosis, even in the absence of the bacillus, is almost conclusive, though not absolutely so, except in advanced cases. Taken by themselves any of these screen appearances is in my opinion quite worthless. The restricted diaphragm movements may be due to old pleurisy, old hydatid or subphrenic abscess. The non-illumination of the lungs is sometimes explained by thickened pleura or unresolved pneumonia. The patches of apparent consolidation may be due to other diseases than tuberculosis, actino-mycosis, for instance, scar tissue from old hydatid cysts or abscess. The small or hanging heart is a pre-tuberculous condition rather than a post-tuberculous consequence.

Another appearance often mentioned is the alteration in the shape of the chest and the width of the rib interspaces. In cases in which this roof tiling, as it is called, occurs, the cases are usually so advanced as to be easily diagnosed even without the assistance of X-rays.

To summarize, X-ray appearances in a case of suspected phthisis, taken with the history and after consultation with the attending practitioner, should afford valuable assistance in the diagnosis of early infection.

In more advanced cases where the diagnosis is not in question, the extent of the mischief and its rate of progress can easily be defined by several screen examinations carried out at regular intervals, careful notes of the appearances being taken at each examination.

The greatest difficulty with which one is faced, is the determination as to whether a definite lesion is in an active or a dormant condition. Where calcification of consolidations has occurred, its recognition is easily obtained, owing to the density of the shadows and the sharpness of their outlines. In the absence of calcification, however, one is compelled to rely on the behaviour of the lung on deep respiration, rather than on its appearances while at rest and in this respect, at any rate, the screen examination is better than the plate.

The Hilus Shadows.

The irregular linear and radiating shadows seen in health on the region of the roots of the lung were for a considerable time the subject of much contro-

versy. It is in my opinion quite impossible to determine when their appearance crosses the border line of health and disease. The age of the patient, his place of residence (town or country), his occupation, the incidence of old infections, often unsuspected and other than tuberculosis, all make it exceedingly difficult to assess this appearance at its true value. The presence or absence of definite glandular enlargement, both bronchial and mediastinal, and the presence or otherwise of definite peribronchial radiating fibrosis are often of great assistance in arriving at a diagnosis. Experience alone is of value in coming to a conclusion as to whether the hilus appearance is consistent with health or is pathological as to its causation. The radiographer knows that the appearance is abnormal, but cannot define the degree of opacity, which enables him to come to that conclusion.

In children the position is simpler, for the presence of increased hilus shadows with glandular enlargement is more often due to tubercular infection than to any other cause.

Pneumonia.

In adults acute lobar pneumonia is rarely examined by means of X-rays, except in the resolution stage. In children, however, the French radiologists attach considerable importance to the X-ray findings, both for diagnosis and prognosis. The presence of what is known as the *triangle pneumonique*, a pyramidal shadow with the base in the axilla and the apex at the hilus, is regarded as a positive sign of pneumonia, even in the absence of chemical signs.

In adults the resolution of a lobar pneumonia is often delayed radiographically long after the disappearance of all clinical signs of the disease.

Pleurisy with Effusion.

The appearances both on the screen and on the plate when fluid is present in the pleural cavity are very definite when the amount is at all appreciable, but the nature of the fluid, whether serum, blood or pus, cannot be determined by X-rays alone. The shadow is uniform and darkest at the base, gradually losing density towards its upper margin, which is usually crescentic in outline. When air is present, the appearances are different and quite characteristic, the upper margin being horizontal and sharply defined. The displacement of the heart towards the opposite side is often a very important factor in the differential diagnosis between lung and pleural conditions.

In pleural effusions the contour of the diaphragm and its movements are lost, while in pulmonary conditions the outer portion of its curve can nearly always be made out (the costo-phrenic angle). Thickened pleura in any portion of its surface is often a troublesome factor in a case, but the uniformity of the shadow and the absence of mottling as a rule enable the radiographer to distinguish this condition from tuberculosis. Localized and interlobar pleuritis with effusion are not common, but they are usually not difficult to detect. The use of angular rays in the vertical plane will show them up with great distinctness in the majority of cases.

Hydatid.

Perhaps there is no condition so easily diagnosed

as an unruptured hydatid cyst in the lung. A ruptured cyst on the other hand is often extremely difficult to recognize, though in such a case the history is nearly always sufficiently definite to explain the lung appearances.

Cysts in the neighbourhood of the aorta may easily be mistaken for aneurysm and the erroneous notion that aneurysms always pulsate has sometimes been responsible for a faulty X-ray diagnosis.

Hydatid in the upper part of the liver is usually diagnosable by a screen examination, as the curved outline of the diaphragm is frequently altered by a dome-like projection easily seen against the clear lung above it.

Abscess of the Lung.

Abscess of the lung is sometimes extremely difficult to diagnose clinically and it is often equally difficult to recognize in the skiagram, but in conjunction with the history and clinical signs X-rays should assist materially towards a definite diagnosis. I am, however, still unable to indicate how to arrive at a differential diagnosis from an encysted or localized empyema.

Neoplasm.

The shadow cast by a new growth in the lung is not at all characteristic and in the absence of the history lung neoplasms are not in many cases easily diagnosed. This is particularly so in primary cases, especially when the history fails to settle the question. The diagnosis is frequently made only by a process of exclusion.

In primary cancer the diagnosis from tuberculosis is often assisted by the fact that in the latter condition the other lung is seldom unaffected, while in cancer the sound lung is usually quite free from any involvement.

Secondary growths are usually found at or near the hilus and are often associated with mediastinal tumours. The nodular form of secondary growths is usually distinct and well defined, though the clinical signs are often difficult to make out owing to the depth of their situation.

Aneurysm.

In a normal chest the shadow of the aorta is almost entirely merged in the central opacity, except for a small bulge to the left. The amount by which this shadow emerges from the mid-line is variable in different individuals, but the experienced radiologist soon determines whether the enlargement is pathological or not and by turning the patient into the right oblique position is able to judge the extent of the enlargement or dilatation. In some cases of new growth in the mediastinum or hydatid cysts, it is at times extremely difficult, if not impossible, to arrive at a definite opinion without the aid of the clinician. I would like again to emphasize the fact that some aneurysms do not pulsate. Strong pulsation often is evidence that the condition is not an aneurysm. It may be due to the aorta being pushed over by a new growth or by a mass of glands. The right anterior oblique position should always be used when a screen examination of the chest for aneurysm is being carried out, as serious errors of diagnosis might

easily be made if the antero-posterior position alone were used.

When it is remembered that the loop of the aortic arch is almost entirely concealed by the central opacity, it can be realized that a general dilatation of the aorta might easily be mistaken for a large saccular aneurysm, were dependence placed alone on the appearances in the antero-posterior position. This is well shown in a series of diagrams prepared by Holzknrecht, of Vienna. A common appearance in aneurysm is the "horizontal heart," in which the heart is pushed down by the weight of the superimposed, enlarged aorta.

This condition is of value in the diagnosis from mediastinal tumour, in which the heart is more often displaced laterally. In cases of aneurysm it is often of great value to administer an opaque bolus to ascertain to what extent, if at all, the oesophagus is displaced or involved.

Where teleskiagraphy at a distance of 2 metres from the tube is impossible, the diascope is of great value in arriving at the true dimensions of an aortic enlargement or aneurysm. In the diascope the tube and screen move in all directions simultaneously in parallel planes. I have found it of great value to make careful tracings to ascertain the progress or otherwise of a case where systematic examinations at regular intervals can be undertaken.

Pericarditis.

Pericarditis cannot be diagnosed by radioscopy, except when the effusion is considerable, when the shadow extends well to the right of the sternum and when its shape is triangular and extends upwards. The ordinary heart pulsations are frequently not discernible.

The Heart.

Beyond a recognition of alterations in size and position, very little information concerning the heart can be obtained with the screen or plate. The apparent size of the heart is dependent to a considerable extent upon the physique of the patient. The heart will appear to be much larger in a short, deep-chested individual than it will in a tall, thin, narrow-chested person, owing largely, though not altogether, to the distance of the organ from the chest wall.

Claims have been made recently that the outline of the heart in valvular disease is sufficiently altered as to be recognized upon the screen and a diagnosis made of the nature of the valvular changes. I have been unable so far to satisfy myself that the alterations produced are sufficiently marked as to be reliable.

Rotation of the heart is frequently seen as a consequence of pleural and pneumonic conditions.

Peribronchial Fibrosis.

Although this condition has long been recognized as a consequence of long continued irritation of the lung tissues, either from infection or from the inhalation of irritating dust or metallic particles, it is only comparatively recently that it has come to be recognized as a very common affection in returned soldiers who have developed lung symptoms.

It is most marked in men who have been gassed.

In all these cases the ordinary hilus shadows are markedly increased either with or without glandular enlargement, but radiating outwards from the hilus are many long branching, tree-like shadows, which extend in some cases to the periphery in all parts of the lungs. In some cases there is evidence of patches of consolidation and other signs of the presence of tubercular infection, but a large number of them present nothing but the very marked condition of fibrosis.

Not all of these patients give a history of having been gassed and in them one is forced to the conclusion that the condition is the result of prolonged exposure to an atmosphere permeated with dust and to the general unhygienic conditions of life associated with warfare.

Lung Conditions other than Tuberculosis.

Streptothrix.—I present to you a slide illustrating the point that the X-ray appearances are insufficient to arrive at a diagnosis without the aid of the clinical history and the pathologist.

The following case was brought to me in 1917 by Dr. Alan Mackay, to whom I am indebted for the following clinical notes.

Case of N.S. was first seen in August, 1917. He was quite well until six months before that date, when he had a severe hæmoptysis followed by cough and expectoration of thin and clear watery mucus. He also suffered from gradually increasing dyspnoea. There was loss of weight. After a three months' interval another hæmoptysis occurred.

The shortness of breath was most marked on the least exertion in August, 1917.

Physical Signs.—There was marked dullness on percussion over the greater part of both lungs. The breathing was generally tubular. There were occasional small rhonchi and râles.

An X-ray examination revealed an intense wide-spread fibrosis. I suggested from the appearance and the history a diagnosis of actino-mycosis. Dr. Mollison and Dr. R. Webster both reported streptothrix in the sputum and the absence of tubercle bacilli.

A diagnosis of pulmonary aspergillosis was arrived at and large doses of iodide of potash up to 3.5 grms. three times a day, were given. The patient moved to the seaside. His condition improved considerably and he became able to walk six or seven kilometres without distress, whereas before treatment he could not walk the length of a room. In May, 1918, he returned to the country and resumed his farm work, but suffered a bad relapse after a few months.

In August, 1919, he came back for treatment and returned to the seaside. He is now able to work in the garden and takes long walks and quite brisk exercise without distress.

Reports of Cases.

A CASE OF SUBACUTE PROLIFERATIVE CHOLANGITIS.

By S. O. Cowen, M.D. (Melb.),

Assistant Pathologist, Children's Hospital, Melbourne.

M.H., female, *et.* 14 months, was admitted to the Children's Hospital, Melbourne, on April 29, 1920, under the care of Dr. Hume Turnbull, to whom I am indebted for permission to report the case. The history of her illness was as follows: Five days before admission she had a "feverish attack," after which she seemed tired and soon became lethargic, sleeping nearly all day and being very irritable when roused. Her appetite was poor; the motions were rather slimy and of dark brown colour; there was no vomiting until the fifth day of her illness, when she vomited once. There was slight cough.

The patient had an attack of pneumonia at six months, from which she made a good recovery. She had otherwise been a healthy child. The family history was good.

On admission she was found to have a temperature of 39° C.; her pulse-rate was 136; her respirations were 32. Examination elicited no abnormal signs in the cardiovascular, respiratory or nervous systems. The throat was clear. The liver was palpable three fingers' breadth below the costal margin and it was thought that there was some irregularity of the outline of the left lobe. The urine contained a trace of albumin on boiling and the report of the pathological examination was: "Gross bacilluria; a little pus." Further report a few days later read: "The organism present in the urine is a non-motile, Gram-negative bacillus, having the cultural and fermentative reactions of the bacillus of Gaertner." The Wassermann test yielded a negative response.

On April 3, 1920, three days after admission, the respirations were somewhat grunting and some crepitations and a few rhonchi were found at the bases of both lungs, without, however, any dullness or tubular breathing.

Throughout the illness the temperature was high, ranging from 39° to 40° C., the curve being of a remittent type; no rigors occurred at any time. The pulse varied from 136 to 160. Though the respirations at times increased to 60 a minute, no signs of consolidation were detected in the lungs. The child became more and more toxic and died on April 7, 1920. At no time during her stay in hospital was jaundice observed, but the parents stated that, in the earlier part of her illness, the patient had a sallow, yellowish appearance.

A *post mortem* examination was made 24 hours after death. The trachea and bronchi contained a quantity of muco-pus and there were some atelectatic patches at the posterior aspect of each lung, but no pneumonic consolidation was found. The mucous membrane of the kidney, pelvis, ureters and bladder was slightly thickened, distinctly hyperæmic and, in parts, rugous. The liver was large, its surface smooth, the capsule slightly thickened and its substance of distinctly tougher consistency than normal. The gall-bladder and bile ducts presented no abnormality. The gastro-intestinal tract appeared healthy. Apart from a considerable amount of toxic spoiling, the other organs showed no gross changes.

As none of these lesions seemed sufficient to account for the gross toxæmia, which was evidently the immediate cause of death, microscopical examination of the liver was undertaken, to determine, if possible, the nature of the enlargement. The section, of which two photographs are reproduced, showed an extremely interesting condition.

With the low power, the spoilt and fatty parenchyma of the liver was seen to be studded with highly cellular areas. At first glance these suggested focal necroses, but closer inspection showed them to be enlarged Glisson's capsules infiltrated with cells and containing numerous bile ducts, which were also distended with cell accumulations. Some of the capsules contained as many as a dozen ducts.

Examination under a higher power showed the lesion to be inflammatory. The cells in the bile ducts were seen to be partly polymorphonuclear and partly mononuclear leucocytes. In many instances the accumulation of cells was sufficient to distend the ducts to such an extent that their epithelium, instead of being cubical, appeared flattened, but all gradations between these two extremes were distinguishable, thus establishing the identity of these structures as true bile ducts, as distinct from the "pseudo bile canaliculi" seen in certain forms of cirrhosis. Within the ducts could be seen clumps of bacilli, which proved

to be Gram-negative. The connective tissue of Glisson's capsules was infiltrated with cells similar to those within the ducts, constituting quite a definite pericholangitis. The outermost zones of the liver lobules showed a small amount of leucocytic infiltration between the strands of hepatic cells. There was no sign anywhere of pus formation and none of the ducts contained inspissated bile.

The most striking feature of the microscopic picture is the proliferation, real or apparent, of the bile ducts. It is difficult to understand how any actual increase in their number could occur, since the nature of the cellular reaction indicates at most a subacute and not a chronic process. Mallory (1), who gives the only description of the condition I have been able to find, accounts for the proliferation by supposing that the commencement of the lesion is acute and distension of the ducts very great, while later, as the inflammatory process becomes less intense, a certain amount of contraction and twisting occurs. He explains the absence of jaundice on the ground that the obstruction of the ducts is focal and not general. In the case under review, I cannot but feel that another and possibly a more important factor lies in the extreme degeneration of the liver cells.

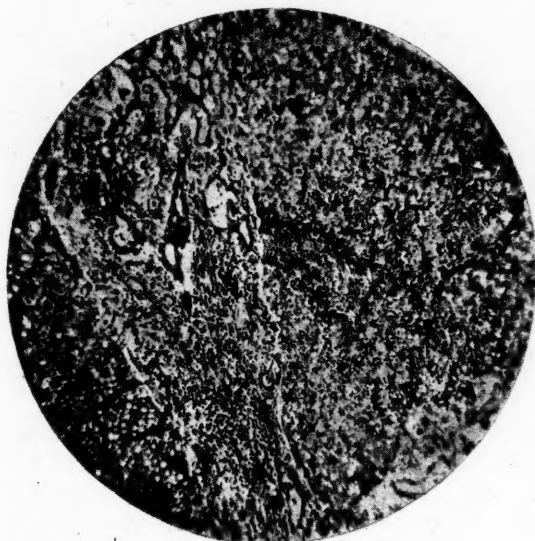


FIGURE I.

Low power, showing the cell permeation of Glisson's capsule and the numerous ducts it contains.

Rolleston (2) quotes two cases with proliferation of the smaller bile ducts, but in both the lesion was of chronic type and pericholangitis an outstanding feature of the microscopic picture. The clinical manifestations and the morbid anatomy of this case differ essentially from those of acute suppurative cholangitis and Hanot's biliary cirrhosis. The name subacute proliferative cholangitis, suggested by Dr. Webster, emphasizes these distinctions and succinctly outlines the main features of the lesion and seems to me preferable to infective cirrhosis, the term used by Mallory. Should the condition become chronic, how-

ever, or should repeated attacks occur, it is possible that a true cirrhosis would follow.

The identity of the bacilli seen in the bile ducts was not established, as, unfortunately, no cultures were made from the liver, but the most natural assumption was that they were identical with the *B. gaertneri* isolated from the urine. As this organism belongs to the intestinal group, it seems probable that its portal of entry was by the bowel, spreading thence to the kidney and directly or indirectly to the liver. The distribution of the lesions in this case would indicate a spread by the blood stream; whether a systemic or only a portal infection was present must remain a matter of speculation, but the limitation of foci to the abdomen rather suggests the latter.

In spite of the uncertainty as to the aetiology of the condition, the case seems worthy of record, not only on account of its rarity, but also because of the obscure and puzzling clinical manifestations.

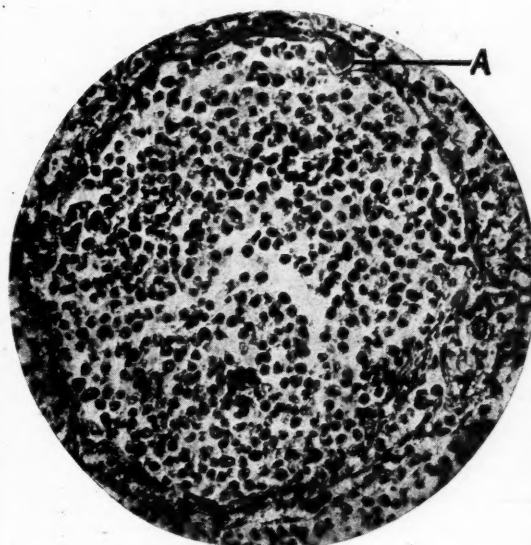


FIGURE II.

High power, showing a duct distended with cells, partly polymorphonuclear and partly mononuclear. The duct occupies almost the whole field, the epithelium of its wall is greatly flattened and, just within its lumen, at A, a clump of bacilli is visible.

Note by Dr. Reginald Webster.

There is but little to add to Dr. Cowen's comprehensive description of a remarkably interesting case. The first suggestion that offered itself, on a low power examination of the microscopic field, was that of miliary abscesses, but the real nature of the lesions became apparent on closer inspection.

I was at once impressed with the multiplicity of bile ducts, in description of which I advanced the term "adenoma of the bile ducts," with a diffidence that was partly dispelled by finding that Mallory (1) used the same phrase in his description of the condition.

Although Mallory illustrated and described the identical appearances observed in Dr. Cowen's sections, the name "acute infective cirrhosis" does not

seem calculated to convey an accurate idea of the lesions. In the descriptive name under which this case is here reported, the term "proliferative" perhaps connotes an assumption. Inspissation of bile, with consequent distension and tortuosity of the smaller ducts, would lead to an apparent increase in their number in cross-section and would account for the microscopic appearances, just as well as would true proliferation.

References.

- (1) Mallory: "The Principles of Pathologic Histology," Philadelphia, 1914, p. 508.
- (2) Rolleston: "Diseases of the Liver, Gall-Bladder and Bile Ducts," London, 1905, p. 673.

Reviews.

EDUCATIONAL PROBLEMS.

"Education in War and Peace" is a reprint of three addresses delivered by Dr. Stewart Paton, in America, entitled "Human Behaviour in War and Peace," "War and Education" and "The Psychiatric Clinic and the Community." Its purpose is to draw attention to the necessity of making provision against the occurrence of "shell shock" or its equivalent in time of peace; first, in our universities, by training investigators to undertake the solution of important psychological problems; secondly, in our schools, by giving the right kind of education to enable a stand to be made against the stress and strain of modern life, an education which will show the psycho-neurotic, driven by a sense of inadequacy and insecurity, how to face squarely and sanely the plain facts connected with living, instead of dodging the main issues.

He upbraids the physician for failing to investigate emotional disorders, the causes of worry and the reason for the psycho-neurotic's general feeling of dissatisfaction with life, thinking that if the medical profession were more active in directing currents of thought into proper channels, there would be less drift towards "Christian Science," "speaking with the dead" and so on. He also rebukes the psychologist for his sins of commission, because in practice he has followed Descartes in regarding the *res cogitans* as separate and distinct from the *res extensa*, because he has described emotions and other mental processes as if they were not directly modified by physiological processes.

A strong plea, one which will be approved by all who have to deal with the psychoses and neuroses, is made for the establishment of neuro-psychiatric centres or clinics, wherein the factors determining human thought and conduct may be considered and human nature studied along broad biological lines. An intelligent co-operation and a pooling of interest between the psychiatrist and the clinician is urged and the practical suggestion made that not only the physical side, but the vagaries of feeling, thinking and acting in every patient admitted to the wards of a general hospital, should be investigated. In this connexion attention is directed to the fruit of the air-service analysis of the personality and predisposition of the would-be aviator.

Dr. Paton writes in forceful style on important problems connected with social reform and, notwithstanding that he is optimistic and perhaps not quite able to sense the practical difficulties bearing on his suggestions, there can be no question that if his schemes could be elaborated, nothing but benefit would ensue.

CHEMISTRY AND HYGIENE

It is inevitable that the director of a successful school in any practical science will write and publish his own laboratory guide. Mr. Gabriel Jones's "Chemistry for Public Health

¹ Education in War and Peace, by Stewart Paton, M.D.; 1920, New York: Paul B. Hoeber, Crown 8vo., pp. 106. Price, \$1.50 net.

Students" is a case in point. There are many such volumes and they are all much alike in merit and in the approach to the subject. The special excellence of this effort is that it is eminently practical and is obviously written by a man thoroughly at home with chemical theory and technique. The directions are concise and unambiguous and the emphasis is, we should say, correctly placed. The addition of a few illustrations would be an improvement—for example, the verbal description of the Haldane gas analysis apparatus whilst admirably done, might lead even some graduate students to bewilderment.

The one omission that strikes the reviewer is the absence of any description of the modern colorimeter and nephelometer, which play so great a part in biochemical analysis. References to food standards and food regulations are concerned with British and not Australian legislation. As stated, however, the book is practical and sound.

It is with regret that we learn that Dr. Charles G. Wilson Marsden died at Bondi, Sydney, on August 13, 1920. Dr. Marsden was a Trinity College (Dublin) graduate, having taken his degree in 1872.

The attention of members of the British Medical Association is directed to some important amendments of the entries under the heading "Medical Appointments—Important Notice"—Victoria (see page 188).

A WARNING.

During the past few weeks some medical practitioners in various parts of the Commonwealth have received a printed communication signed by one Fred. Johns, of Adelaide, requesting the recipient to enter in an accompanying form personal and professional particulars for insertion in a publication called "Who's Who in the Commonwealth." In certain instances a specimen page of the projected publication is sent with the other papers.

Members of the British Medical Association in Australia are earnestly requested to consign this circular appeal to the waste paper basket. At its meeting held on February 1, 1915, the Federal Committee resolved:—

That the Federal Committee, having given due consideration to the question of the propriety of responding to the invitation of the publishers of the *Medical Who's Who*, expresses the opinion that it is undesirable for medical practitioners to permit personal notices of themselves to appear in such publications.

It was obviously intended that this resolution should cover general biographical books as well as medical. It must be remembered that there is the strongest objection existing to advertisements on the part of medical practitioners. Notices in publications like the one referred to above can be avoided by a refusal to supply the information required. Medical practitioners should not be led astray by the handwritten note on the printed letter informing them that all medical men who served in the war, would be included, or that some other special reason existed to justify compliance with the request. Apart from the medico-ethical aspect of this question, we are inclined to the opinion from perusal of the specimen page that the information conveyed by this publication will not be of a valuable kind.

¹ Chemistry for Public Health Students, by E. Gabriel Jones, M.Sc., F.I.C.; 1920, London: Methuen & Co., Ltd. Crown 8vo., pp. 244.

The Medical Journal of Australia.

SATURDAY, AUGUST 21, 1920.

The Constitution of the British Medical Association.

The President of the South Australian Branch of the British Medical Association, Dr. H. Simpson Newland, C.B.E., D.S.O., has selected an old-time piece of medical history as the subject of his address at the annual meeting of the Branch. The choice is both timely and wise. To-day the Australian Branches stand before a change, possibly a change of significant magnitude. The Council of the parent Association has recommended the Representative Body to approve of an alteration in the constitution of the Association, to enable the overseas Branches to secure greater freedom and autonomy. The suggestion has been made to extend the membership of the Association to independent medical bodies under certain conditions. Information is not yet available concerning the manner in which this corporate membership will be offered, but from the indications given in the annual report of the Council, it would appear that it was contemplated to admit to membership incorporated medical societies whose objects, articles of association and regulations are in harmony with the Memorandum, Articles and By-laws of the British Medical Association, provided that sufficient safeguards can be given that the corporate member would not involve the parent body in financial liabilities or in other forms of embarrassment resulting from action taken without the sanction of the Council. In order to understand the position, it is necessary to refer to the constitution of the Association prior to the reconstruction in 1902 and to the existing constitution. Formerly the British Medical Association was composed of members who had equal powers and who could exercise the right of voting in the ordinary manner at the annual meetings of the Association. The management of the Association was vested in a Central Council, which was composed of members elected by the members of the Association. The Association extended over the greater part of the British

Empire and for the sake of convenience members residing in given areas grouped themselves into Branches. It was not necessary for a member residing in the area of the Branch in those days to be a member of that Branch. There were unattached members and members of one Branch residing in the area of another Branch. The government was neither democratic nor adequate for the large organization. For several years before the end of last century it was felt that the Association had outgrown its machinery and that nothing short of a new plant would prove satisfactory. It was largely due to the clear organizing abilities of Dr. Smith Whitaker that the new constitution was devised and perfected. The fundamental idea of the new constitution was that the members should be replaced by groups of members as the units of the Association. In the United Kingdom the country was divided up into areas and every member residing within each area was provided with the means of recording his vote locally on all matters of policy. These areas are called Divisions. The Division of the Association comprises all the members resident within its area. Each Division or group of Divisions appoints a representative to attend at the Representative Meeting and to record by voting the opinions of the majority of the members of the Divisions. The Representative Body is the governing power of the Association. The Council, whose members are appointed partly by the Branches or groups of Divisions and partly by the Representative Body, is the executive. It was further found that control of the local affairs of the Association within certain limitations should not be taken over by the Council. In order that this local control might be planned on as wide a scale as possible, it was arranged that contiguous Divisions could be grouped together to form Branches. The Councils of the Branches were given the power to act in certain circumstances and to stand as intermediaries between the Divisions and the Central Council, the executive of the Association. In certain cases it was not expedient to form groups of Divisions. This was especially the case in the overseas Divisions. It was found that if no provision were made for these special cases, the Divisions would lack the useful machinery of the Branches. In these circumstances it was determined that these Divisions should be simultaneously Branches. It thus appears that the Branch-Divisions,

called Branches, figure in the Association as units for administrative and government purposes. It is not proposed to modify this arrangement, as it has proved itself to be eminently satisfactory. It endows the Association with the qualities of a true democracy. It may be assumed that in the modifications proposed, the corporate members would not be given voting powers greater than those of the individual members of the Association. If the corporate member were accepted to replace a Division or a Branch-Division, it would have the right of representation in the Representative Body. But if the corporate body were merely a portion of a Division or Branch-Division, its members would be required to record their wishes through the mouthpiece of the Division or Branch-Division. Translated into Australian conditions, each Branch is a Branch-Division. Each Branch in Australia has the right to send a member to the Representative Meeting and together with other Branches to send another member to serve on the Council of the parent Association. It has, further, the local powers of a Division and of a Branch. As a unit of the Association it is indivisible. It would be competent for the members of the Association residing in a given area within a Branch area to suggest that they form a Division, provided that the remainder of the area agreed to form another Division or a number of Divisions. The whole area of the Branch would have to be covered by the areas of the new Divisions. On the other hand, a localized area of a Branch in Australia cannot form itself into a Division of the Association. Unless the subdivision be complete, as indicated, the local area is at best only part of a Division, usually called a Branch. The only way in which a local group of members can join the British Medical Association under the present constitution is by obtaining affiliation with the Branch. Under the new scheme the local group could apply for recognition as a corporate member of the Association and consequently as part of a unit. It is obviously advantageous for medical practitioners living far from the capital cities in the several States to form groups in this way. They should, however, remember that at present the best arrangement available is affiliation with the Branch, although in the future they may be admitted, *en masse*, as a member of the Association, thus rendering affiliation unnecessary.

HYSTERIA.

The study of the neuroses of war has added considerably to the knowledge of the nature and basis of functional derangements of the nervous system in general. The previously accepted conception of hysteria presupposed the existence of certain mental and physical stigmata which were believed to exist before symptoms developed and to persist after the disappearance of symptoms. Dr. A. F. Hurst¹ in a recent article dealing with the subject of hysterical vomiting, affirms the views previously propounded by Babinski, that physical stigmata do not exist until they have been produced by the unconscious suggestion of the observer; the mental stigmata, such as an abnormal degree of suggestibility, are present only in a comparatively small proportion of cases. Hysteria is then defined as a condition the symptoms of which have been produced by suggestion and are curable by psycho-therapy.

Prominent amongst the neuroses of war, the condition of hysterical loss of sight has frequently attracted considerable attention. It has been found that in the majority of such cases the symptoms have been produced definitely by powerful suggestion. For instance, a man blown up by a high explosive shell may have been rendered unconscious and partially buried. On the return of consciousness his eyes may have been temporarily put out of action by being filled with earth or in other instances by oedema of the conjunctiva, resulting from the fumes of irritant gases. One of the first conscious impressions returning to the patient would be the fact that he was unable to see. In some patients this suggestion has produced such a profound effect upon the mind that the idea becomes firmly established and can only be removed by vigorous counter-suggestion, perhaps under hypnosis.

Similarly many cases of functional loss of hearing have been observed in soldiers. Not infrequently patients suffering from continued vomiting after gassing come into the same category. The irritant gases were absorbed and produced an abundant secretion of saliva. The saliva was swallowed and carried the irritant to the stomach. This led to a condition of acute gastritis and subsequent vomiting, lasting for a few days. It was followed by persistent vomiting which remained after the original exciting cause had ceased to exist. In discussing cases of this nature Dr. Hurst points out that in every instance the hysterical vomiting was suggested by the existence of some form of vomiting, which was not in itself hysterical. In civil life the constant vomiting commonly observed in anemic young women may frequently be explained in a similar manner, as may also cases of persistent vomiting after gastro-enterostomy, which is occasionally observed in patients in whom obstruction or actual food regurgitation can be excluded by radiographic examination. In these patients the absence of wasting is usually a striking feature. In many cases of persistent vomiting after operations and severe post-anæsthetic vomiting, it is probable that the continuance of the symptoms is due to auto-suggestion. Treatment by counter-suggestion

¹ *The Medical Review*, May, 1920.

in such instances is usually effective, the use of the stomach tube often acting in this manner.

Reflex vomiting produced by labyrinthine disturbance in sea sickness, train sickness and such conditions may frequently be perpetuated and aggravated by suggestion.

Quite recently an American medical officer reported brilliant results in the prevention and treatment of *mal de mer*, by plugging the external auditory canal tightly with gauze. This was done with the object of damping the vestibular reflex, but acted in all probability by suggestion. It is possible that the condition of *hyperemesis gravidarum* may be sometimes produced by the effect of suggestion, being nothing more than a functional aggravation of the usual morning vomiting of pregnancy.

The possibility of an hysterical basis should always be considered in cases of persistent vomiting in which definite organic disease can reasonably be excluded by physical examination. In such cases treatment by psycho-therapy should be instituted, rather than the administration of sedatives, restrictions of diet and the therapeutic measures usually employed. Excellent results are claimed in these cases following treatment by simple explanation, which is the most rational form of psycho-therapy. It is necessary to obtain the entire confidence of the patient and to convince him that the explanation is correct, moral persuasion and subsequent encouragement being sufficient to maintain the cure.

THE DIPHTHEROIDS.

In the issue of *The Journal of Tropical Medicine and Hygiene* of April 15, 1920, is published a learned and instructive article by Dr. A. J. Chalmers, Director of the Wellcome Tropical Research Laboratories, Khartoun, and Mr. M. Macdonald, Assistant in the Bacteriological Laboratory of the Institute, on "Some Soudanese Diphtheroids." In the same issue is a leading article, unsigned but not impersonal, a last affectionate greeting and warm appreciation, by one of the Editors of the *Journal* on the sudden and unexpected death from an acute infective hepatitis of his colleague and friend. *The Journal of Tropical Medicine and Hygiene*, has been edited, at all events nominally, by the three "C.'s," Cantlie, Castellani and Chalmers, with the collaboration of three other practitioners eminent in the world of tropical medicine and with Ross, as honorary adviser to the Editors. The writer of the article points out that he had hoped that Chalmers would have taken editorial charge of the *Journal* when he returned to London in 1911. The resignation of Dr. Andrew Balfour of his position as Director of the great tropical institute in Khartoun, with which Mr. H. S. Wellcome has enriched the world, led to the appointment of Chalmers and his return to the tropics. We have now a last scientific message from this profound student of tropical bacteriology, a dissertation full of measured criticism and the results of accurate observation.

It will be within the memory of every medical practitioner that in the year 1883 Klebs described a bacillus which he had stained in false diphtheritic

membrane. Klebs held that this organism was a secondary causal agent of diphtheria. He ascribed the chief rôle to an organism named by him *Microsporium diphtheriticum*. In the following year Löffler demonstrated that a small rod-shaped bacterium could be cultivated from the false membrane. The cultures on blood serum were characteristic. Shortly before this Kuschbert and Neisser described *Bacillus xerosis*, a distinct organism associated with xerosis of the conjunctiva. Löffler's work led to the acceptance of the rod-like organism which now bears his name, as the causal organism of diphtheria. He also isolated an avirulent strain. In addition a non-pathogenic organism, known as the Hoffman-Wellenhof bacillus, was added to the group of bacteria called diphtheroids. Chalmers is of opinion that the bacillus described by Zarniko was identical with Löffler's avirulent strain. He traces the work done in connexion with these organisms and the attempts made to enter them in their correct classes. Some advance was registered in 1894 by Parke and Beebe by the distinction between glucose fermenters and those bacteria which do not ferment glucose. Two years later Lehmann and Neumann formulated a new genus for these organisms under the name *Corynebacterium* (from *κορυνη* a club). In 1912 these investigators recognized six or more members of the group. Graham-Smith contributed to the literature a description of two new organisms in 1904 and others have also endeavoured to clarify the grouping. In 1918 Ebersson offered a somewhat complex, but quite rational classifications of the diphtheroids. In their present article, Chalmers and his assistant describe three new organisms and one previously identified member of the group of diphtheroids. Accepting Lehmann and Neumann's definition, he starts with the type species *Corynebacterium diphtheriæ* (Klebs, 1883) and proceeds to distinguish the *Putidum* group, organisms that liquefy gelatine, the *Hoagii* group, those that do not liquefy gelatine, but form pigment on blood serum, the *Klebs-Löffler* group, organisms that do not liquefy gelatine nor form pigment on blood serum, but produce acid in glucose and other carbo-hydrates and lastly the *Hoffmann-Wellenhof* group, organisms that do not liquefy gelatine, do not form pigment on blood serum and do not produce acid in glucose. His new Soudanese diphtheroids fall in the *Klebs-Löffler* group. This group he has divided into two sub-groups. The first contains organisms morphologically resembling *C. diphtheriæ*. The second sub-group contains those organisms which differ from the type species. In the first are *C. diphtheriæ*, *C. xerosis*, *C. muris* (Klein, 1903), *C. auris* (Graham-Smith, 1904), *C. maculatum* (Graham-Smith, 1904), *C. enzymicum* (Mellon, 1917), *C. pseudodiphtheriæ* (Ebersson, 1918), *C. gordonii*, *C. paragordonii*, *C. archibaldi* and *C. sudanensis*. The four last are new names and with the exception of the third owe their recognition to Chalmers. He gives lucid definitions and descriptions of each member of the first sub-group and draws up a helpful table, to facilitate the identification of a diphtheroid resembling *C. diphtheriæ* in its morphological characters.

Abstracts from Current Medical Literature.

DERMATOLOGY.

(65) Pre-Cancerous Lesions of the Vulva.

F. J. Taussig has undertaken a comprehensive study of the various skin lesions affecting the vulva, in an endeavour to trace the relation between the various affections and malignant disease of this area (*Archives Dermatol. and Syphilol.*, June, 1920). In this, the tenth contribution on the subject, he deals with leucoplakic vulvitis, *kraurosis vulvæ* and pruritus. In order to determine the nature of the initial lesions, he has found it advisable to make a histological examination of the vulval tissue in healthy elderly women. He points out that carcinoma of the vulva is essentially a disease of old age. Among 100 women, whose average age was 67 years, he found that all variations of vulval atrophy were encountered. The atrophy was independent of age, of the amount of atrophy in other parts of the skin and of the amount of vaginal discharge. The extreme forms were more common in women who had borne children. Pruritus was rarely present. This condition appears to be unassociated with advanced age or with vulval atrophy. Its origin is often unknown and there is no tendency to malignant changes. *Kraurosis vulvæ* appears to be the result of repeated traumatism, with low-grade infection in women after the menopause. It is associated with an extreme form of atrophy. The author states that there is no tendency to malignant degeneration in *kraurosis*. He has found that leucoplakic vulvitis is attributable to peculiar skin changes, resulting from the cessation of ovarian function. In between 90% and 95% the patients are past the menopause, while in those younger women in whom it occurs, there is usually some disturbance of ovarian function. The lesion consists in an absorption of elastic tissue from the upper layers of the corium. This absorption of elastic tissue leads to slight breaks in the epidermis and thus to repeated infection. The exudation leads to pruritus, which, in turn, leads to increased traumatism. The author maintains that leucoplakic vulvitis has no association with syphilis. He recognizes, however, that the coincidence of this condition and chronic arthritis has a causal significance and traces both conditions to what is termed a focal infection. Leucoplakic vulvitis is frequently associated with malignant disease. Taussig finds that in a typical cancer following leucoplakic vulvitis there is the combination of the cessation of ovarian function, the disappearance of elastic tissue and the existence of a chronic inflammation.

(66) The Effect of Light on Vitiligo.

Carl With (*Brit. Journ. Dermat. and Syphilis*, May, 1920) publishes the results of observations on the skin of persons affected with vitiligo and on the result of the exposure of the affected areas to Flinsen and other forms of

light. He shows that inconspicuous plaques of skin, devoid of pigment, become very noticeable after the application of the carbon arc light bath. This is due to the erythema produced in the normal areas of skin. He endeavoured to produce new areas of vitiligo by exposure to light, but was unsuccessful. The carbon arc light leads to the appearance of a macular pigmentation in the vitiligo patch. This pigmentation closely resembles freckles. It spreads from the periphery to the centre and lasts for many months. The pigment-free skin reacts at first quite readily to the light, but later shows an increasing amount of tolerance. The same process can be observed in normal pigmented areas of skin. From these observations he deduces that pigmentation is not the only barrier which the organism possesses for the purpose of protecting itself against light. An apparently strong and early pigmentation provides a smaller power of resistance against light than a less strong, more recently acquired pigmentation. He recognizes, however, that whatever other mechanism is called into use for the purpose of protection against light, pigmentation normally plays an important part.

(67) A Case of Tumour-Like Chancre of the Thigh.

A. M. H. Gray records a case of tumour-like chancre of the thigh in a girl, aged twenty years (*Brit. Journ. Dermatol. and Syphilis*, February, 1920). The lesion had been present for two months. Starting as a small spot, it had slowly and regularly increased in size. There had been no pruritus, pain or discharge from the lump. Sore throat and headache were observed a month after the development of the sore, but no cutaneous eruption had ever been noticed. The Wassermann reaction had been found to be positive. On examination, there was an oval swelling on the front of the left thigh, at the junction of the middle and upper thirds; it measured 4.5 cm. \times 3.75 cm. and was raised some 6 or 7 mm. from the surrounding skin. The margin of the swelling rose abruptly from the skin, while the summit was hollowed out into a wide, saucer-shaped depression. Surrounding the base of the tumour was a sharply defined, hard, collar-like band, of a dead white colour. The tumour itself was of a purplish colour, was elastic to the touch and had a glistening smooth surface, except over a small area in the central depression, which was covered by a thin crust. There was no sign of moisture over the general surface of the tumour. Dark ground examination of some of the serum showed it to be teeming with spirochaetes. There was a mass of hard, painless, freely movable glands in the left groin and, in addition, the patient had a slight but definite general adenitis. The author states that ulcerating and fungating chancres of considerable size have been frequently described, but these smooth, dry, tumour-like chancres are of much less frequent occurrence. The diagnosis may be made by the presence of the char-

acteristic collar-like margin and by the presence of spirochaetes in the exudate.

(68) Radiographic Appearances in Non-Tubercular Pulmonary Conditions.

Lloyd Bryan, in an article on the skiagraphic diagnosis of non-tubercular pulmonary lesions, agrees with Baetjer, of the Johns Hopkins Hospital, that if an imaginary line be drawn horizontally through the middle of the chest, all lesions occurring above it are tuberculous and all occurring below it are non-tubercular, exclusive of mediastinal conditions (*California State Journ. Med.*, June, 1920). He finds that lung abscess is difficult to distinguish from pulmonary tuberculosis. It generally occurs in the lower lobes and casts an irregular shadow of varying density, with a gradual fading towards the periphery. When partially filled with pus it is easier to distinguish, as the fluid casts a dark area, with a level upper margin and a light area above it; the bronchial glands are also enlarged on the affected side. Tubercular cavities are revealed as a light central area with a dense fibrous surround, while the usual tubercular mottling appears in other parts of the lung. Bronchiectasis and abscess are difficult to differentiate, but at times a skiagram taken before coughing and after coughing will show that the bronchiectasis has been emptied by the act of coughing. In bronchiectasis there is also a marked fibrous thickening along the line of one of the larger bronchi. Malignant disease may be primary or secondary. When primary, it usually commences near the hilum and when secondary it appears as a series of irregular nodular shadows and is difficult to distinguish from multiple abscess. Pneumokoniosis is usually bilateral and equally advanced in both lungs and marked fibrosis is usually present. It is not always possible to distinguish it from tuberculosis and, of course, both conditions may be present simultaneously. The author urges the necessity of co-operation between the radiologist and clinician in the diagnosis of pulmonary conditions.

(69) Radiographic Findings in Pericarditis.

George W. Holmes (*Amer. Journ. Röntgen.*, January, 1920) deals with the radiographic findings in pericarditis with effusion, basing his observations on a series of experiments on animals and on a study of sixty cases in human beings. The cardiac shadow is increased in all cases and the presence or absence of pulsation depends on the amount of fluid present. The cardio-hepatic angle is obliterated in the standing position, but it may remain unaltered when the patient is recumbent. In all cases it was impossible to distinguish between the shadows of the auricle and ventricle; the heart shadow could not be distinguished through the effusion. The cardiac shadow rises towards the sternal notch and is increased in width at its base. Differentiation from mediastinal pleurisy, hypertrophy and dilatation of the

heart is generally easy. The absence of pulsation, with the presence of the characteristics of the shadows referred to above, is of diagnostic significance.

BIOLOGICAL CHEMISTRY.

(70) The Metabolism of White Races in the Tropics.

A. Ozorio de Almeida has studied in detail the minimum metabolism and the basal metabolism of white men born and living in Brazil (*Journ. de Physiologie et de Pathologie Générale*, March, 1920). By minimum metabolism is meant the quantity of heat produced by an individual when he remains in a state of minimum functional activity. The basal metabolism is the minimum metabolism, divided by the area of the

cutaneous surface: $Mb = \frac{S}{S}$

variations of basal metabolism in normal individuals in temperate climates have been shown by Du Bois, Means, Benedict and others to be small, being within the limits $39.7 \pm 10\%$. The basal metabolism of athletes is about 9% higher than among non-athletes of the same height and weight. The author has determined the basal metabolism of ten healthy men between the ages of 23 and 40 years, born and living in tropical Brazil. The experiments were always made in the morning, after a fast of at least twelve hours, with the subject lying comfortably on a bed, in the most perfect possible repose. The determinations were made by indirect respiratory calorimetry. The air was breathed through a mask and the air expired for the first 5 to 15 minutes was neglected. Expired air was then collected for 10 to 20 minutes and the carbon dioxide and oxygen determined. The mean of 26 experiments on the ten subjects gave a basal metabolism of 30.35, with a range in the means of the different subjects from 25.67 to 37.56. As the subjects were in no way abnormal as to health or dietary, the conclusion must be drawn that inhabitants of warm climates have their basal metabolism very much lower than that of inhabitants of cold or temperate climates. It is evident that, from the point of view of acclimatization to warm climates, the reduction of metabolism is of great importance, for it represents, for the organism, the acquisition of a new property, that of reducing the production of heat to a very low level, not attained by organisms accustomed to low temperatures. For the human species acclimatization consists essentially in the slow and progressive modification of the basal metabolism, up to the fixation of a value more compatible with the new conditions of climate in which the individual finds himself. In addition, the author draws several other conclusions from his results. All the causes which act for a long time on the value of the total metabolism of the organism, such as muscular work, climate and diet, end by modifying the minimum and basal metabolism. The minimum and basal metabolism are not proportional to the total nitrogen of the organism nor to the mass of living protoplasm. The quantities of heat

produced by different individuals submitted to the same conditions at any given moment depend, not only on their respective cutaneous surfaces, but also on the habitual intensity of their heat-production in the past. The differences in basal metabolism of white persons acclimatized to tropical conditions, explain the well known facts relative to the temperature at which one commences to have the sensation of cold. This temperature is higher in warm climates; it appears at a temperature above 20°C . in the inhabitants of Rio de Janeiro.

(71) The Action of Snake Venom on the Coagulation of the Blood.

B. A. Houssay and A. Sordelli have studied the action of the venom of a large number of different varieties of snakes on the coagulation of the blood (*Journ. de Physiologie et de Pathologie Générale*, March, 1920). The venoms which coagulate the blood produce *in vivo* an initial augmentation of the coagulability (positive phase) and later its diminution or disappearance (negative phase). The rapid introduction of a moderately large dose produces intravascular thrombosis, partial or massive, which commences in the portal vein. The initial positive phase is due principally to the thrombic action of the venom, but other causes contribute. During the positive phase there is formed fibrin, which is deposited, as it appears, on the erythrocytes and probably on the endothelium of the vessels. Apparently the liver and the intestines are the organs which principally fix the fibrin as it is being formed. The negative phase is due to the disappearance of fibrinogen. The blood, thus rendered incoagulable, contains free venom, but no thrombin and usually no anti-thrombin. The venoms which do not coagulate produce incoagulability, but only in large doses. The blood, thus rendered incoagulable, can be coagulated by extracts of tissues, thrombin or coagulating venoms, for it contains fibrinogen. The anti-coagulating venoms do not produce a positive phase; they do not defibrinate the blood and generally do not produce anti-thrombin in appreciable quantity. They destroy the thrombokinase and consequently thrombin is not formed.

(72) Acetone Bodies and Plasma Bicarbonate in Ether Anæsthesia.

It is a common observation that urine voided following ether anæsthesia gives positive sodium nitroprusside and ferric chloride tests for acetone bodies and that, as a result of the anæsthetic, there is a decrease in the CO_2 combining power of the blood plasma. Because of this coincidence it has been believed by many that the formation of acetone bodies accounts for the decreased alkaline reserve. J. J. Short (*Journ. Biolog. Chemistry*, April, 1920) has made observations on the acetone bodies before and after ether anæsthesia on twelve patients and on the CO_2 combining powers before and after ether anæsthesia of the plasma of eight of these patients. A series of blood and urine specimens from each of two of these patients was also with-

drawn over a number of hours following ether anæsthesia, the blood, in addition to determinations of aceto-acetic acid, acetone and β -hydroxybutyric acid, being examined for total fats and the urine for the acetone bodies. It was found that the blood concentration of acetone bodies was but little affected during the period of anæsthesia, which was, on the average, a period of 43 minutes. It was found in the two cases examined over a longer period that there was an increase in these substances a few hours later, a finding which was confirmed by their increased output in the urine. It would appear that the increased values for acetone bodies could have but little to do with the decreased bicarbonate. The CO_2 combining powers increased even during increase of β -hydroxybutyric acid. Acetone bodies, further, are not formed promptly enough during ether anæsthesia, in the cases reported, to account for the decreased plasma bicarbonate.

(73) Chemical Changes in the Blood in Advanced Nephritis.

Victor C. Myers and John A. Killian have estimated the concentration of uric acid, urea and creatinine in the blood of cases of advanced nephritis (*Journ. Biolog. Chemistry*, March, 1920). Creatinine appears to be most readily excreted by the kidneys and is therefore the last to be retained in nephritis. The kidney is apparently unable to overcome the handicap of a high creatinine accumulation, this making creatinine a most valuable prognostic test. Of 85 patients having a creatinine of over 5 mgr. per 100 c.cm. of blood (figures up to 33 mgr.) 80 have died. The question naturally arises whether creatinine may not be responsible for some of the terminal symptoms as a result of its conversion to methylguanidine, a point which has not yet been definitely answered. Severe acidosis is an invariable accompaniment of advanced nephritis, the CO_2 in twelve instances being low enough to afford an explanation of coma and death.

(74) Chemical Identification of the Thyroid Hormone.

E. C. Kendall has apparently succeeded in isolating and obtaining in pure form the iodine containing compound upon which the activity of the thyroid depends (*Journ. Biolog. Chemistry*, March, 1920). Its chemical structure is related to that of tryptophane, from which it is probably derived. The compound has been named thyro-oxyindol, which has been abbreviated to thyroxin. The iodine in the molecule, which is attached to the benzene ring, does not appear to be involved when the substance affects the energy output, but the chemical groups responsible for its activity are the CO-NH groups, which in the body change their form to amino carboxyl groups and the substance, in all probability, functions in this form. Thyroxin, although not an amino-acid, is essentially an amino-acid and it falls into the well-known fundamental groups of substances: amino-acids, proteins, creatinine, creatine, etc.,

British Medical Association News.

ANNUAL MEETING.

The annual general meeting of the South Australian Branch was held in the Lister Hall, Hindmarsh Square, Adelaide, on June 24, 1920, Dr. H. S. Newland, C.B.E., D.S.O., the President, in the chair.

Annual Report of Council.

The Honorary Secretary presented the annual report of Council, as follows:

Report of the Council for the Year Ended June, 1920.

Membership.—The Branch has now 275 on the roll, 16 being added during the year by election and transfer. One member resigned and we regret to have to record the deaths of Dr. M. Jay (one of the early members of the Branch), Dr. Boër (of Streaky Bay) and Dr. V. Drew (of Bordertown).

President.—Sir Joseph Verco resigned from the office of President in August and it was decided to place on record the appreciation of the members of his splendid services during a trying and anxious period. Dr. H. S. Newland was then elected to the vacant position and members were pleased to note the additional honour bestowed upon him for his services with the Australian Imperial Force.

Meetings.—Since the last annual meeting there have been held nine ordinary and five special meetings of the Branch, all well attended, the average being between 35 and 40. The Council met on twelve occasions.

The special meetings were called to consider Federal Committee matters, the *Opticians and Venereal Diseases Bills and Association*, lodge and other subjects. At the ordinary meetings papers were contributed by the President (Dr. Newland), Drs. Pulleine, Krakowsky, Rennie, Hone, T. G. Wilson, McAree, L. A. Hayward, Ray and Gilbert Browne, whilst one evening was occupied by an address on "Child Welfare" by Dr. Truby King.

Lodge.—The Committee appointed by the Council to con-

sider lodge matters reported to two special meetings of the Branch. This Committee was, at the last special meeting, empowered to deal with the lodge representatives in settling the terms of lodge practice and the lodges are now considering the resolutions passed at that meeting. There is ground for the belief that a friendly conclusion of the negotiations will be arrived at in the very near future. Negotiations are necessarily somewhat slow, because all matters have to be referred to the individual lodges by their representatives; they are being conducted in a very friendly spirit.

We wish to remind members that the proposed model lodge agreement will, in its broad principles, be the guide for all lodge agreements throughout the State; there will, of course, be some variations to cope with local conditions. It is hoped that no new agreements will be entered into till the whole question is settled, but lodge surgeons should carry on under the existing terms till such time as the new model lodge agreement comes into force.

Federal Committee.—Drs. Hayward and Hone represent the Branch till the end of this year. Dr. Hone expressed his wish to retire at the end of last year, but was prevailed upon to continue in the office.

Sub-Branches.—A sub-committee has been appointed to consider the question of forming local sub-branches or sections of the Branch and hopes to soon be in a position to be able to advise groups of men away from the city as to the means to be adopted.

Library.—Owing to the increased cost of periodicals, the grant to University Library has only been sufficient to pay for those now being taken.

Medical Acts.—A new *Medical Act* came into force at the end of last year and *Venereal Diseases and Opticians Bills* were brought before the Parliament.

The report was received.

Treasurer's Statement.

The Honorary Treasurer, Dr. W. A. Verco, presented his annual statement, as follows:

Revenue Account for Year Ended December 31, 1919.

	£	s.	d.
By Plant (Cupboards, Cases, etc.)	129	4	9
„ Bank Balances—			
National Bank	£71	3	11
Commonwealth	161	16	3
Savings Bank	245	15	3
Savings Bank (Library)	67	15	10
		546	11 3
„ Cash in Hand		32	2 0
„ Subscriptions in Arrear, 1916 to 1919 inclusive		337	14 0
	£1,045	12	0

	£	s.	d.
To Due Medical Benevolent Fund	3	11	3
" Medical Defence Association	1	0	0
" Subscriptions for 1920	1	7	6
" <i>British Medical Journal</i> , Collected	156	9	0
" Due <i>British Medical Journal</i> , Arrears	134	8	0
" Due <i>The Medical Journal of Australia</i>	94	15	0
" Balance as above	654	1	0
	£1,045	12	0

Balance Sheet as at December 31, 1919.

	£	s.	d.
By Balance, December 31, 1918	668	12	1
" Subscriptions for 1919 and Arrears Collected	407	9	6
" Dividend—Australian Medical Publishing Co.	20	17	0
" Interest on Bank Accounts	16	18	1
	£1,113	16	8

	£	s.	d.	£	s.	d.
To Expenditure—						
Salaries Account	60	0	0			
<i>The Medical Journal of Aus- tralia</i>	222	0	0			
University Library	50	0	0			
Federal Committee	50	19	6			
Printing, Postage, Stationery	37	5	2			
Advertising (Resuming Prac- tice)	21	18	0			
Lecture Hall Hire	1	16	6			
Cupboard for Papers, etc. ..	6	17	6			
Australian Medical Publishing Co.	2	3	0			
Depreciation of Plant	6	16	0			
					459	15 8
„ Balance					654	1 0
					£1,113	16 8

Audited and found correct,
PAUL T. SCOTT, F.A.I.S.,
Auditor.

The statements were received.

Membership Subscription.

Dr. W. T. Hayward, C.M.G., moved and Dr. W. A. Verco seconded:

That the fee for membership of this Branch be £2 2s. per annum for the first three years after graduation at the University of Adelaide.

A short discussion followed and the motion was carried.

Election of Office-Bearers.

The following were elected office-bearers and members of the Council for the ensuing year:

President: Dr. H. S. Newland, C.B.E., D.S.O.

Vice-Presidents: Dr. D. Smeaton and Dr. J. E. Gunson.

Honorary Treasurer: Dr. W. A. Verco.

Honorary Secretary: Dr. H. A. Powell, C.M.G.

Members of Council: Dr. L. O. Betts, Dr. D. Dawson, Dr.

H. J. Riddell, Drs. J. E. Good, A. A. Lendon and

Malcolm Scott (elected last year).

Library Committee: The President, the Honorary Secretary, Dr. H. Swift, Dr. A. A. Lendon, Dr. F. S. Hone.

Presidential Address.

Dr. H. S. Newland, C.M.G., read the presidential address, entitled, "The Founder of the British Medical Association: His Life and Aims" (see page 169).

Sir Joseph Verco, in moving a hearty vote of thanks to Dr. Newland, said that it was a fortunate and happy thought to give an outline of the life of the founder of the Association, Sir Charles Hastings. They were most particularly concerned with his regard for his profession and with his foresight in thinking of what would be of benefit to its members. It would probably interest members present to know that there was in the Library of the University a copy of the first volume of the *Transactions of the Provincial Medical and Surgical Association*. The subjects dealt with by the President in the latter part of his address concerned them largely. He was very pleased that these matters had been taken up by Dr. Newland.

The vote of thanks was carried by acclamation and Dr. Newland responded in suitable terms.

SCIENTIFIC.

A meeting of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on July 7, 1920, Mr. G. A. Syme, the President, in the chair.

The President welcomed Major Thomas Cherry, Major R. O. Douglas, Major J. P. Kelly and Major A. J. Trinca on their return from active service.

Dr. Stanley Argyle read a paper entitled "The Value of X-ray Diagnosis in Thoracic Affections." The paper was illustrated by lantern slides (see page 169).

Dr. A. V. M. Anderson, in opening the discussion, expressed his appreciation of Dr. Argyle's very interesting demonstration, which exhibited the dependence of the clinician on the skiagraphist for the interpretation of various clinical signs. Pulmonary tuberculosis in its earlier stages, for instance, was very often a condition difficult of diagnosis and X-rays, by showing up peri-bronchial fibrosis, enlarged glands and small spots of consolidation, the detection of which by physical signs might be obscured by overlying emphysema, was of the greatest assistance. Dr. Argyle had spoken of the use of X-rays in pneumonia. He (Dr. Anderson) had been impressed with its probable utility in this direction during the influenza epidemic. At the period of the influenza epidemic in America, X-ray equipments had been installed as adjuncts to the medical wards. There could be no doubt as to the benefit that would be derived from the adoption of a similar plan in Australia. Closer co-operation and consultation between clinicians and radiologists would thereby be secured, with resulting greater accuracy of diagnosis and interpretation of physical signs. Certain aspects of pneumonia, such as delayed resolution, pleural effusion, empyema, pericardial effusion, lent themselves well to detection in skiagrams. But perhaps skiagraphy afforded its best assistance in hydatid disease of the lung. Many of these cases were vague in clinical signs and, indeed, were not uncommonly missed. An X-ray examination frequently con-

verted a very obscure case of this condition into one in which the diagnosis was definite. In aneurysm, also, valuable aid was obtained by the use of X-rays. Skiagraphy was, of course, a routine in hospital whenever aneurysm was suspected. In a doubtful case it should never be omitted; photographs of aneurysm were generally easily interpreted.

Dr. Anderson said that he had been much impressed by Dr. Argyle's statement that absence of pulsation by no means excluded the existence of aneurysm. In this connexion the speaker quoted two cases within his own experience, in which aneurysm had been confounded with hydatid. He had been particularly interested in the military patients to whom Dr. Argyle had referred. Many of these men he had seen at Macleod and undoubtedly their physical signs were peculiar. A proportion of them were asthmatic. He wished to inquire of Dr. Argyle if he had made any observations on X-ray findings in cases of asthma. For instance, had any consistent enlargement of the bronchial glands been observed or other conditions which might support the reflex theory of asthma?

Dr. Anderson concluded with a further expression of thanks to Dr. Argyle for his valuable paper.

Dr. C. E. Dennis tendered his congratulations to Dr. Argyle on the manner in which he had dealt with the subject of X-rays in thoracic affections. Dr. Argyle had emphasized the necessity for the radiologist being supplied with full clinical details, a point with which he (Dr. Dennis) fully concurred. It was not sufficient to refer a patient to the radiologist with no other information than "(?) phthisis." In his own practice he preferred to make a preliminary screen examination of the patient's chest and then to consult the clinical history. Dr. Dennis remarked that in radiology the normal chest was very infrequently seen. In any case this was a term which needed some definition. Age and occupation had to be taken into consideration in estimating departures from the normal, as evidenced by X-ray examination of the chest. A certain thickening of the peribronchial lines was scarcely abnormal in a patient of 40 years or upwards, whereas it would be regarded as pathological in an individual of 20. As to occupation, he had noted among miners in Ballarat that practically all showed a degree of peribronchial fibrosis. Dr. Dennis laid stress on the fact that the screen was useful for the rough pathology of the chest only; the finer details could be elucidated only by means of a plate.

With reference to pulmonary hydatid, Dr. Dennis agreed that X-ray diagnosis was easy, as a rule, if the cyst were unruptured, but it was not invariably so. He recollected one instance in which the X-ray examination revealed a typical half ball above the diaphragm, moving up and down with respiration, to all appearance a hydatid cyst of the upper surface of the liver. Mr. Bird operated and found a sarcomatous tumour.

In regard to the condition of the military patients to whom Dr. Argyle had made reference, Dr. Dennis said that he had seen many cases of this type and had been particularly interested in them. His first acquaintance with them was at Harefield, where he had made a large number of screen examinations. Diminished translucency was the extent of the information imparted by a screen examination and he soon realized the necessity for taking plates of all. All these patients had been "gassed" or had spent a period in a gas area, during which time they inhaled constant small doses. He had seen a large number since his return, during the course of work at No. 5 Australian General Hospital. The X-ray photographs of the chest showed a characteristic picture. The condition was, apparently, a pure peribronchial fibrosis; the whole bronchial tree was increased; fine radiating lines, with here and there small dots of thickening, were the conspicuous feature and the hilus shadows were enlarged. While abroad he had been very much interested to see a German communication, which described this same condition that he (Dr. Dennis) had studied at Harefield. He was referring only to young men of under 30. After that age he would be much more cautious in regarding the condition as pathological. Unfortunately, it had appeared recently that an increasing number of these soldiers were exhibiting definite consolidations and mottlings, as if tuberculosis were developing. Dr. Dennis had noted that the small heart that radiographers generally associated with the tuberculous predisposition was not detected in many of the patients in whose sputum tubercle bacilli were present. He

had examined a considerable number of these patients after a twelve months' interval and in many the tuberculous process seemed to be receding and fibrosing. He had wondered if these observations indicated that the subsequent course of the tubercular process was more favourable in patients not predisposed, but he offered it as a suggestion only. In many of the "gassed" patients, with their complaint of "choking sensations," etc., and negative physical examination, the diagnosis rested on radiography. Many French physicians had taken the view that these patients were neurasthenic, an opinion with which he could not agree after having seen so many and studied them with the aid of skiagrams.

Dr. Walter Summons joined with the other speakers in their expressions of thanks to Dr. Argyle. He had been especially interested in the discussion which had centred around the military cases. He had been forced to the conclusion that there was a greater element of tuberculosis in these soldiers than was formerly thought. Whether the process had been tuberculous from the outset or was a super-added infection it was difficult to say, but it was to be remembered that these men were fit men in the first instance. Many had not had a severe "gassing," but had received repeated small doses as the result of periods of duty in gas areas. These patients were now presenting themselves with loss of weight, tiredness and general asthenia. Their physical examination, as a rule, failed to disclose any pathological changes. Practitioners in charge of these patients could almost anticipate the report of "hilus shadows" from the radiologist. In support of the opinion that many of these soldier patients were tuberculous, Dr. Summons, speaking from memory, stated that there had been 541 admissions to the military sanatorium at Mont Park since its inception and there were many more patients on pension who had not been to the sanatorium. This figure was out of proportion to the number of cases of tuberculosis arising in non-soldiers of the same general type. The fact remained that these men were unable to work. From the point of view of pension it was very important that a proper diagnosis should be made in these men and that their general physical capacity should be accurately gauged. Treatment by prolonged rest and holiday had not sufficed to effect a cure in many instances. Dr. Summons considered that the weight of evidence pointed to the unfortunate presence of tuberculosis in many of the military patients under discussion, rather than a non-specific irritative process. There was no question as to the utility of X-rays to assist in the diagnosis of pulmonary tuberculosis.

Dr. K. Stuart Cross expressed the very great interest with which he had followed the discussion. He was not disposed to attach much significance to "hilus shadows" *per se*. He thought it was necessary for the radiologist to go further afield when searching for evidence of tuberculosis. During his term of duty as radiologist at No. 16 Australian General Hospital in 1919 he had excellent opportunities for observing the radioscopical appearances in pulmonary tuberculosis, owing to the close proximity of the sanatorium at Mont Park. Major Keith Moore, who was in charge of the tuberculous soldiers, had co-operated with him and had supplied detailed clinical findings for comparison with the X-ray observations. Screen and plate examinations were made on each patient as a routine procedure. It was unfortunate that the work had been interrupted by the closing of No. 16 Australian General Hospital. However, the findings of Major Moore, as clinician, and of himself, as radiologist, had been in close agreement throughout the series.

He agreed with Drs. Dennis and Argyle regarding the necessity for the taking of plates in radioscopical examination of the chest. The screen showed only the ordinary functions, such as the diaphragmatic excursions, the lighting up of the apices on coughing, the appearance of the posterior mediastinum and the gross pathology. The plate was essential for anything approaching an appreciation of details. Dr. Cross had found considerable differences in the radiographical appearances in soldiers with peribronchial fibrosis following "gassing," etc., and in those with tuberculosis. In the former condition the picture was that of a continuous, uniformly distributed, gradually diminishing thickening of the lines of the broncho-vascular tree, down to the smallest branches. In tuberculosis, on the other hand, the bronchial characteristics were small, discrete nodules, strung like beads on a necklace along the branches, equally spaced and often

almost contiguous—a nodular peribronchitis. It was quite a distinctive appearance when compared with that observed in "gassed" men. Another feature of tuberculosis was to be found in small, discrete nodules, with an outline varying from a "fluffiness" to a hard-cut contour, situated in the apical parenchyma. He regarded such nodules, with involvement of the corresponding bronchial branch, as very suggestive of tuberculosis. At No. 11 Australian General Hospital he had met with a certain number of men who were affected with gross general fibrosis, in addition to nodules in the parenchyma of the apices and nodular peribronchitis. He regarded the apical nodules in these cases as indicative, or, at least, suggestive, of a tuberculous process superimposed on the general peribronchial fibrosis.

Dr. F. Kingsley Norris referred to the utility to be anticipated from the use of X-rays in those cases of pneumonia in which it was difficult, if not impossible, to locate the process by ordinary physical signs. It had frequently been his experience among children that an infection with all the features of pneumonia would eventually terminate by crisis, without any success attending the efforts to demonstrate the site of the consolidation. In such instances there seemed to be a field of usefulness for X-rays. As Dr. Argyle had mentioned, the French observers had applied radiography in this connexion and quite recently Freeman, in America, had reported a series of 25 cases in the *Archives of Pediatrics*. In all Freeman's patients the crisis occurred without any local signs having been manifested, but X-ray examination had disclosed the site of the pneumonic process as early as the second day. Why no physical signs should appear in this type of case was not quite clear, but it certainly appeared that help might be afforded by radioscopy. In regard to the difficult question of enlargement of the bronchial glands in children, Dr. Norris remarked that it was extremely difficult to detect this condition by the evidence afforded by physical signs alone. The so-called distinctive signs, such as areas of diminished breath sounds, D'Espine's sign and Lombardi's sign, were very illusory. In fact, the diagnosis could not be made without the aid of X-ray examination.

Dr. S. O. Cowen wished to refer briefly to two points in connexion with the clinical aspect of the pulmonary fibrosis of soldiers. The first was the discrepancy between the marked changes demonstrable by radiography and the slightness of the physical signs, which seldom amounted to more than a little relative dullness, diminution of the breath sounds and slight exaggeration of the vocal fremitus on one side or other. Even in mild cases, however, a diagnosis could be arrived at by carefully comparing the physical findings on the two sides of the chest.

The other point to which he would allude was the difficulty of excluding a tuberculous element in these cases. Many of the patients presented symptoms such as loss of weight, tachycardia, sweating and morning cough, which might or might not be due to a tuberculous lesion. In 1919, when he was seeing many returning soldiers, the general improvement after arrival home rather indicated that the condition was a non-specific inflammatory one. This view, as Dr. Dennis had pointed out, was at that time confirmed by the X-ray findings. He was sorry to learn from preceding speakers, who were still seeing these patients, that, latterly, many of them were definitely tubercular. In conclusion, Dr. Cowen asked whether any work had been done to ascertain the value of intradermal injections of tuberculin in establishing a diagnosis in these doubtful fibroses among soldiers, since a definite decision, soon after their return, was essential for proper treatment and just assessment of pension.

Dr. Argyle, in reply, expressed his appreciation of the discussion evoked by his paper. In regard to Dr. Anderson's query relating to X-ray observations in asthma, he had noted at times some tendency to fibrosis, which, however, was never of the same degree as that seen in the soldiers they had been discussing. Glandular enlargement, also, was sometimes observed in asthma, as though some infection had been at work. It would, however, be necessary to pay special attention to a large number of asthmatics, in order to speak authoritatively on the subject.

He was not in complete agreement with Dr. Cross on the subject of hilus shadows. In his own practice he frequently drew attention to them. It was certainly difficult in many instances to say exactly when the border line of the normal was passed in interpreting hilus shadows and it became a

question for experience to determine when a significant degree of exaggeration was present.

With reference to pneumonia in children and the use of X-rays, Dr. Argyle could not speak from experience, but thought that the exposure and handling of the patient involved were serious drawbacks. With Dr. Anderson he was convinced that the time was ripe for the radiographer's equipment to be installed as an adjunct to the ward, so that the physician and the radiologist might co-operate in ward work.

The undermentioned have been elected as members of the New South Wales Branch:—

- J. I. Hunter, Esq., M.B., Ch.M., 1920 (Univ. Sydney), Wesley College, Sydney University.
R. E. Jefferis, Esq., M.B., Ch.M., 1915 (Univ. Sydney), Sydney Hospital.
A. M. Luker, Esq., M.B., Ch.M., 1918 (Univ. Sydney), 42 College Street, Sydney.

Congress Notes.

Programme of Sectional Meetings.

I.—Section of Medicine.

Tuesday, August 24—

- 10 a.m.: "Presidential Address," Dr. R. R. Stawell.
"Localized Sepsis and Its Relation to Genereal Diseases; Oral Sepsis," Dr. J. H. S. Jackson.

Wednesday, August 25—

- 10 a.m.: "Thyro-Toxic Types of Disease and Analogous Conditions of the Other Ductless Glands."
Combined with Section of Gynecology: "Influence of the Ductless Glands on the Menopause," Dr. N. McArthur.

Thursday, August 26—

- 2.15 p.m.: Combined Meeting with Sections of Ophthalmology, Otology and Neurology: "Papilledema."

Friday, August 27—

- 9 a.m.: Combined Meeting with Surgical and Naval and Military Sections: "Gastric and Duodenal Ulcer," the medical aspects being introduced by Drs. G. E. Rennie and R. R. Stawell.

Combined Meeting with Section of Public Health: "Some New Aspects of the Functions of the Skin in Temperature Regulations," Professor W. A. Osborne.
Also: Dr. A. Brein's paper.

Miscellaneous Papers—

- "Experiences with Soldiers' Heart," Dr. J. W. Springthorpe.
"Treatment of Acute Febrile Diseases," Dr. C. Joyce.
"Heart Action and Murmurs" (illustrated by lantern slides), Dr. J. M. Gill.
"The Principles of Diagnosis," "Diagnostic Exercises," "Curiosa Phthisica," Dr. Guy Griffiths.
"The Manufacture of Drugs in Australia," Mr. R. C. Cowley, Director of the Pharmacy Board.

II.—Section of Surgery.

Tuesday, August 24—

- 10 a.m.: Presidential Address, "Rhinoplasty," Dr. H. S. Newland (illustrated with lantern slides).
11.45 a.m.: "Treatment of Equino-Varus, Congenital and Acquired," Dr. W. Kent Hughes.
12.30 p.m.: "Inguinal Hernia in Aged Men," Honourable J. B. Nash.

Wednesday, August 25—Combined with Section of Naval and Military Medicine and Surgery—

- 10 a.m.: "The Repair of Traumatic Apertures in the Skull by Bone Grafting," Dr. R. Gordon Craig.
10.40 a.m.: "Bone Grafts," Dr. F. A. Hadley (illustrated with lantern slides).

12.15 p.m.: "Fatal War Wounds, a Clinical and Pathological Report of 282 Cases," Dr. Percy A. Stevens.

Thursday, August 26—

- 9 a.m.: "Papillomata of the Urinary Bladder: Treatment and After Results," Dr. S. Harry Harris (illustrated with lantern slides). Discussion opened by Dr. R. Gordon Craig.

Combined with Section of Naval and Military Medicine and Surgery—

10.30 a.m.: "The Factors of Success in Tendon Transplantation," Dr. Lennox Teece.

11 a.m.: "The Position of Rest and the Effect of Treatment on the Recovery of Muscles After Nerve Suture," Dr. Norman D. Royle.

11.30 a.m.: "Treatment and Results of Nerve Suture," Dr. P. G. Dane.

Demonstration of Microscopical Nerve Sections, by Dr. J. V. Duhig.

Friday, August 27—

9 a.m.: "Problems in the Surgical Treatment of Gastric and Duodenal Ulcer," Dr. H. Devine (illustrated with forty lantern slides). Discussion opened by Dr. G. E. Rennie (Combined with Section of Medicine and with Section of Naval and Military Medicine and Surgery).

Others Papers—

"Gastropexy," Dr. Theodore Ambrose.

"The Microscopic Changes in Muscle After Exposure to the High Frequency Current," Professor D. A. Welch.

"Omentopexy," Dr. D. P. O'Brien.

III.—Section of Obstetrics and Gynecology.

Tuesday, August 24—

10 a.m.: "Presidential Address," Dr. Fourness Barrington.

11 a.m.: "Acute Pelvic Inflammation: Causation and Treatment," Dr. R. H. Morrison.

11.30 a.m.: "Puerperal Infection: Successful Surgical Treatment," Dr. A. J. Nyulasy.

11.40 a.m.: "Acute Pelvic Inflammation: Causation and Treatment," Dr. H. H. Schlink.

Noon: "Acute Pelvic Inflammation: Causation and Treatment," Dr. Chenhall.

Wednesday, August 25—

10 a.m.: Combined Meeting with Section of Medicine: Discussion on the "Ductless Glands." Opener for the Section of Obstetrics and Gynecology, Dr. Norman McArthur.

Thursday, August 26—

9 a.m.: Discussion, "Teaching of Obstetrics," Dr. T. G. Wilson.

"Some Points on Clinical Obstetrics," Dr. J. C. Windeyer.

Other Papers—

"Fibrosis Uteri," "Orginal Methods: Procidencia Uteri,"

"Uterus Bicornuate," Dr. Norman McArthur.

"The Supports of the Uterus," Dr. A. J. Nyulasy.

IV.—Section of Pathology and Bacteriology.

Presidential Address: "New Methods: Sera Production," Dr. W. J. Penfold.

"Practical Experiences with Antigens in the Wassermann Reaction," Drs. Mona Ross and A. H. Tebbutt.

"On Pneumococci in Pneumonia in Sydney," Dr. A. H. Tebbutt.

Combined with Section of Dermatology, Radiology and Medical Electricity—

"Experiences with Laboratory Tests of Cure in Gonococcal Infections," Drs. Mona Ross and A. H. Tebbutt.

"Complement Fixation Test in Gonorrhoea," Dr. C. J. Wiley.

"Actinomycosis," Dr. J. V. Duhig.

"Further Observations on the Immunity Response in Helminthic Infestations and the Indications for Intravenous Therapy with Antimony Compounds, with Microscopic Exhibit of Specimens, etc.," Dr. N. Hamilton Fairley.

"Tropical Relapsing Fevers," Dr. N. Hamilton Fairley.
"Sections on the Pathology of Tinea Echinococcal Infestations," Dr. N. Hamilton Fairley.

"Anthrax in Shaving Brushes," Dr. E. W. Ferguson.

"Histological Changes in Mustard Gas Poisoning," Dr. W. Wilson Ingram (with lantern slides).

"Volatile Antiseptics," Dr. W. Wilson Ingram.

"Work on Pneumococci," Dr. W. S. Patterson and Miss Williams.

"Work on Pneumococci," Dr. W. J. Penfold and Miss Scott.
"Streptococcal Vaccine in the Treatment of Chronic Infections," Dr. A. F. Bell.

- "An Attempt to Estimate Quantitatively the Complement Fixing Power of Doubtful Syphilitic Sera," Dr. J. V. Duhig.
 "Streptococci: Numerous Varieties," Dr. J. I. Connor.
 "Demonstration of Tubercle Bacillus Cultures Isolated by Antiformin and by Inoculation into Guinea Pigs," Dr. W. J. Penfold.
 "Demonstration of Parasite in Blood of Filarial Patients," "Demonstration of Microscopical Nerve Sections," Dr. Oliver Latham.

V.—Section of Public Health and State Medicine.

- Wednesday, August 25—Before full Congress—
 9 a.m.: "Presidential Address," Dr. J. H. L. Cumpston.
 "Industrial Hygiene as Applied to Women Munition Workers," Mrs. W. A. Osborne.
 "The Relationship of the General Practitioner to Preventive Medicine," "The Teaching of Public Health and Preventive Medicine to Medical Students," Dr. F. S. Hone.
 "Legislation and Administration with Reference to Venereal Disease," Dr. Everett Atkinson.
 "Development in Australian Maritime Hygiene Under the Navigation Act, 1912-1919," Dr. R. L. Park.
 "The Application to Civil Life of the Lessons of Military Hygiene Derived from the Great War," Dr. Holmes.
 "Hookworm in Australia: Team Work in Sanitation," Dr. W. A. Sawyer.
 "The Control of Insect Vectors of Disease in War and Peace," Dr. J. S. Purdy.
 "Control of Venereal Disease in the Mercantile Marine," Dr. Mitchell.
 "Principal Causes of Morbidity in the Australian Tropics," Dr. Collins.
 "Sprue in North Queensland," Dr. P. S. Clarke.
 "Parasites of the Human Intestine in North Queensland," Dr. Lambert.
 "A Statistical Survey of Causes of Death in Tropical Queensland," Mr. G. S. Macleod, Government Statistician.
 "A Statistical Survey of Causes of Death in Australia," Mr. G. H. Knibbs.
 "The Life Insurance Aspect of Residence in Tropical Australia," Mr. Elliott, Chief Actuary, Australian Mutual Provident Society.
 "Venereal Diseases in North Queensland," Dr. R. A. Macqueen.
 "The Organization and Operation of Venereal Disease Clinics," Dr. E. H. Molesworth (combined with Dermatology Section).
 "The Thermotaxis of the Human Body in North Queensland," Dr. Young.
 "The Mental and Physical Reactions of Queensland Women Students," Miss Bage.
 "Control of Mosquito Infestation in City Areas," Dr. T. A. Price.
 "Anti-Malarial Work in Sinai and Palestine with the Anzac Mounted Division," Dr. Harvey Sutton.
 "Health of School Children in Central South Australia," Dr. G. Halley.

VI.—Section of Ophthalmology.

- Tuesday, August 24—
 10 a.m.: "Presidential Address," Dr. A. Leo. Kenny.
 11 a.m.: Discussion on "Iritis," opened by Dr. C. J. Halliday.
 "Expression of Lids for Trachoma" (with exhibition of instrument), Sir James Barrett.
 "Siderosis," by Dr. J. Lockhart Gibson.
 Other papers.
 Wednesday, August 25—
 10 a.m.: Discussion on "The Visual Acuity Standards for Military Service," opened by Sir James Barrett. Paper by Dr. Lindo Ferguson (title unknown).
 "Exhibition of Recording Scotometer," Dr. E. O. Marks.
 "Exhibition of De-ionizing Apparatus for Plumbism," Dr. J. Lockhart Gibson.
 "Exhibition of Glioma of the Optic Nerve of Both Eyes," Dr. J. Lockhart Gibson.
 Thursday, August 26—
 9 a.m.: Exhibition of Cases, ophthalmoscopic and others, followed by discussion: (1) "Injuries from High Explosives to the Cornea, Lens and Choroid"; (2) "Cases in Which Foreign Bodies Have Been Removed by the Giant Magnet"; (3) "Cases of Partial Post-Neuritic Atrophy of the Disc as the Result of Plumb-

ism"; (4) "Case of Blindness Due to Bullet Wound Through Both Occipital Lobes"; (5) "Case of Rupture of Carotid in Cavernous Sinus, with Good Results from Operative Treatment"; (6) "Hernia of Vitreous into Anterior Chamber."

Afternoon: "Papilledema" (combined discussion with Sections of Medicine, Neurology and Otolaryngology).

Friday, August 27—

Combined Discussion with Section of Otolaryngology: (1) "Sinus Disease"; (2) "The Relief of Lachrymal Obstruction Through the Nose."
 "Pain at the Back of the Neck," Dr. R. Graham Brown.
 Other papers.

VII.—Section of Otolaryngology and Laryngology.

Tuesday, August 23—

- 10 a.m.: "Presidential Address," Dr. Herbert Marks.
 Discussion on "The Treatment of Laryngeal Tuberculosis," opened by Dr. W. Kent Hughes.
 "Foreign Bodies in the Oesophagus and Air Passages," Dr. R. Godsal.
 "Foreign Bodies in the Tracheo-Bronchial Tree," Dr. W. A. Dunn.
 "Naso-Pharyngeal and Pharyngeal Disinfection," Dr. Hardie Neil (illustrated with lantern slides).
 "Complete Examination of the Internal Ear," opened by Dr. Shuter.
 "Non-Operative Treatment of Ear Suppuration," Dr. Shorney.
 "The Tonsil," Dr. Ewing.
 Combined Meetings—
 Thursday, August 25 (afternoon)—
 "Papilledema" (with Sections of Medicine, Neurology and Ophthalmology).
 Friday, August 26 (morning)—With Section of Ophthalmology—
 (1) "Surgical Treatment of Sinus Diseases," opened by Dr. Barry Thompson.
 (2) "Lachrymal Obstruction: The Intranasal Treatment of the Sac," opened by Dr. Shorney.
 Demonstrations of Enucleation of Tonsils Under Intratracheal and Gas Anaesthesia will probably be arranged.

VIII.—Section of Neurology and Psychological Medicine.

Tuesday, August 24—

- "Presidential Address," Sir Henry Maudsley.
 Combined Meetings—
 Wednesday, August 25 (morning)—
 Combined with Section of Medicine—
 "War Neuroses," Dr. W. M. Macdonald and Dr. J. W. Springthorpe.
 Thursday, August 26 (afternoon)—
 Combined with Sections of Medicine, Ophthalmology and Otolaryngology—
 "Papilledema," Professor A. E. Mills.
 "Symptomatology of Transverse Lesions of the Spinal Cord," Dr. G. E. Rennie.
 Combined with Medical Section—
 Lantern Demonstration of Microscopic Sections of the Brain and Spinal Cord.

Papers—

- "Psycho-analysis and its Application to the Treatment of a Case of Mental Deficiency," Dr. G. E. Rennie.
 "The Necessity for the Provision of Neuro-Psychiatric Clinics," Dr. Ernest Jones.
 "Prognosis in Mental Diseases," Dr. M. Gamble.
 "Feeble-Mindedness," Dr. P. Lalor.
 "The Physical Basis for Insanity," Dr. W. A. T. Lind.
 "Psychology and Medicine," Dr. J. W. Springthorpe.
 "The Psychic Treatment of War Shock as Applied to Stammering," Dr. T. G. Leary.
 "The Pathogenesis of War Neuroses, with Special Reference to War Hysteria," Dr. A. C. Fraser.
 "The Treatment of Functional Nerve Disease Among Returned Soldiers in the Second Military District," Dr. R. A. Noble.
 "The Neurotic Basis of 'D.A.H.,'" Dr. S. F. McDonald.
 "Cases Illustrating Recent Psychological Methods of Treatment," Dr. T. H. R. Mathewson.
 Drs. Guy Prior, Clarence Godfrey and R. C. Withington have also promised papers, the titles of which are not available.

IX.—Section of Diseases of Children.

Tuesday, August 24—

"Presidential Address," Dr. W. F. Litchfield.

Papers on various subjects.

Wednesday, August 25—

10 a.m.: Discussion on "The Surgical Treatment of Infantile Paralysis," opened by Dr. G. Bruton Sweet and Dr. H. Douglas Stephens.

Papers on surgical subjects.

Thursday, August 26 (at the Hospital for Sick Children)—

(a) Demonstration of Tropical Diseases.

(b) Demonstration of other cases of interest.

Discussion on "White Children in the Tropics."

Friday, August 27—

Discussion on "Gastro-Intestinal Troubles of Infancy,"

opened by the President and Dr. Jeffreys Wood.

Papers on medical subjects.

X.—Section of Naval and Military Medicine and Surgery.

Tuesday, August 24—

9 a.m.: "Presidential Address," Colonel R. J. Millard (before full Congress).

10 a.m.: "The Necessity for Applying Standards for Qualifications of Sailors and Soldiers," Sir James Barrett. Discussion on "Recruits," opened by Dr. A. Graham Butler.

11 a.m.: "Sanitary Organization for War," Dr. J. S. Purdy.

11.30 a.m.: "First Mobile Sanitary Section," Dr. Harvey Sutton.

12 noon: "The Necessity for the Establishing of a Staff Training College for Medical Officers of the Army Medical Corps," Dr. J. V. Duhig.

Wednesday, August 25—

Combined with Section of Surgery—

10 a.m.: "The Repair of Traumatic Apertures in the Skull by Bone Grafting," Dr. R. Gordon Craig.

10.40 a.m.: "Bone Grafts," Dr. F. A. Hadley (illustrated with lantern slides).

12.15 p.m.: "Fatal War Wounds: Clinical and Pathological Report of 282 Cases," Dr. Percy A. Stevens.

Thursday, August 26—

Combined with Section of Surgery—

10.30 a.m.: "The Factors of Success in Tendon Transplantation," Dr. Lennox Teece.

11 a.m.: "The Position of Rest and the Effect of Treatment on the Recovery of Muscles After Nerve Suture," Dr. N. D. Royle.

11.30 a.m.: "Treatment and Results of Nerve Suture," Dr. P. G. Dane.

Demonstration of Microscopical Nerve Sections, by Dr. Oliver Latham.

Combined with Radiology Section—

2 p.m.: Demonstration of War Radiograms, Dr. S. Argyle.

Combined with Public Health Section—

3 p.m.: "The Application to Civil Life of Experiences in Hygiene Gained During the War," Dr. Holmes.

4 p.m.: "Observations on the Clinical and Applied Pathology of Malaria," Dr. N. H. Fairley.

Friday, August 27—

9 a.m.: "Problems in the Surgical Treatment of Gastric and Duodenal Ulcer," Dr. H. Devine (illustrated with forty lantern slides). Combined with Sections of Medicine and Surgery.

Noon: "Experiences with Soldiers' Heart and Some Lessons of the War," Dr. J. W. Springthorpe.

12.30 p.m.: "Medical Arrangements in the Field on Active Service," Dr. A. H. Moseley.

XI.—Section of Dermatology, Radiology and Medical Electricity.

Tuesday, August 24—

10 a.m.: Presidential Address: "The Scope and Development of Dermatology in Australia, with Special Reference to the Organization of the Skin Departments at General and Teaching Hospitals," Dr. E. H. Molesworth.

Noon: "Epidermatomycosis in Mice and Men, Epidemic of Same Occurring in Australia during 1917, Connected with the So-Called Mouse Plague," Dr. Herman Lawrence.

Wednesday, August 25—

10 a.m.: "Complement Fixation Test in Gonorrhoea," Dr. C. J. Wiley (combined with Pathology Section).

Thursday, August 26—

9 a.m.: "Cross-Fire Radium and X-Ray Therapy in the Treatment of Malignant Disease," Dr. Herman Lawrence.

10 a.m.: "Radiography of the Alimentary Tract," Dr. J. G. Edwards (illustrated by 100 lantern slides).

Lantern Demonstration of Interesting Cases, Dr. J. G. Edwards.

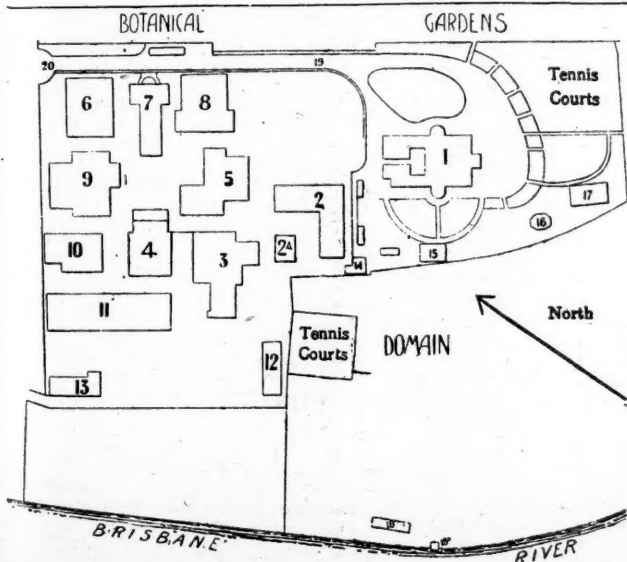
2.15 p.m.: Demonstration of War Radiograms, Dr. S. Argyle (combined with Section of Naval and Military Medicine and Surgery).

Friday, August 27—

9 a.m.: "A Few Brief References, with Suggestions," Dr. A. A. Doyle.

10 a.m.: "The Organization and Administration of Venereal Diseases Clinics," Dr. E. H. Molesworth (combined with Public Health Section).

"Wax Models of Diseases of the Skin," Dr. W. McMurray.



THE UNIVERSITY OF QUEENSLAND.

In our issue last week the accompanying plan of the grounds and buildings of the University of Queensland was produced, but the key was unfortunately omitted.

Key.

1. University Main Building.
2. Chemistry Building.
- 2a. Walter and Eliza Hall School of Applied Chemistry.
3. Engineering Building.
4. Physics and Biology Building.
5. Geology Building.
- 6 to 11. Central Technical College.
12. Metallurgy and Assaying.
13. Engineering Laboratory.
14. Biology Animal Yard.
15. Women's Common Room.
- 16-17. Men's Common Room.
18. University Boat Shed.
- 18a. Pontoon.
19. Road.
20. Entrance Gates, George Street.

Plan No.

Section I.—Medicine	3
Section II.—Surgery	5
Section III.—Obstetrics	1
Section IV.—Pathology	4
Section V.—Ophthalmology	1
Section VI.—Otolaryngology	1
Section VII.—Neurology	3
Section IX.—Diseases of Children	1
Section X.—Naval and Military	1
Section XI.—Dermatology	4
Office of General Secretary	1
Office of The Medical Journal of Australia	1

Naval and Military.

APPOINTMENTS.

The following announcements appear in the *Commonwealth of Australia Gazette*, No. 66, of August 12, 1920:—

Australian Imperial Force.

Second Military District.

Captain L. H. Stanton-Cook, Australian Army Medical Corps, having resigned, his appointment in the Australian Imperial Force is terminated in England on 13th May, 1920, but to take effect from 12th June, 1920.

Third Military District.

Captain H. G. Downer, Australian Army Medical Corps, having resigned, his appointment in the Australian Imperial Force is terminated in England from 7th May, 1920, but to take effect from 5th June, 1920.

Fourth Military District.

Captain J. N. Webb, Australian Army Medical Corps, having resigned, his appointment in the Australian Imperial Force is terminated in England on 13th May, but to take effect from 30th May, 1920.

University Intelligence.

THE UNIVERSITY OF SYDNEY.

A meeting of the Senate of the University of Sydney was held on August 9, 1920, at University Chambers, Phillip Street, Sydney.

The following recommendations, contained in a report of the Finance Committee, were adopted: (1) That the book on the American universities by Professor Holme be published. (2) That it be referred to a committee to report upon the selection of the chairs to be known as McCaughey chairs.

A letter was received from Dr. Cecil Purser, asking for leave of absence from the meetings of the Senate. It was resolved that leave be granted and also that a letter of sympathy during his illness be forwarded.

The degree of Ch.M. was conferred *in absentia* upon Mr. Robert Henry Puleine, M.B.

Mr. Piddington moved the following motion, standing in his name: "That the press be admitted to the meetings of the Senate."

Mr. Board moved the following amendment: "That a shorthand report be taken of the proceedings of the Senate and a statement prepared therefrom by the Warden for publication in the press."

After considerable discussion the amendment was carried.

THE RATTEN INQUIRY.

His Honour the Chief Justice of Tasmania delivered his reserved judgement on August 9, 1920, on the application by the Medical Council of Tasmania that a commission should be issued to take certain evidence in Chicago and Texas. The application has been refused and an order in favour of Victor Richard Ratten for costs has been entered. His Honour based his decision on a consideration of the question whether the jury would be able to determine the credibility or otherwise of witnesses from evidence taken elsewhere. He had to apply principles of law. If the commission were issued, the evidence would be taken and the jury would not have the opportunity of seeing the demeanour of the witness and of observing the way in which the various questions put to him in cross-examination were answered. He had arrived at the opinion that the present case was one particularly unsuitable for trial in this way.

Obituary.

ARCHIBALD GLADSTONE CORBETT.

After three years' absence from Australia on active service, Captain Archibald Gladstone Corbett, Australian Army

Medical Corps, was lost overboard on the night of June 5, 1920. He was returning in the mail steamship *Orontes* for the long anticipated return home. The vessel was only five days out when the tragedy occurred.

Archibald Gladstone Corbett was educated at Wesley College, Melbourne, and on the completion of his term at that school, entered upon clerical duties with the Australian Mutual Provident Society, Melbourne. His determination to follow the profession which most attracted him, was not relaxed during this period. At the age of 28 he entered Ormond College and commenced his medical course at the Melbourne University. That he was enabled to reach his goal was due largely to his own efforts of perseverance and thrift, in the exercise of which qualities he gave indications of an earnestness of character and devotion to duty which later impressed all who knew him.

He graduated in 1917 and immediately enlisted with the Australian Army Medical Corps. He saw service as regimental medical officer to the 50th South Australian Battalion, 4th Division, Australian Imperial Force, in France and Belgium. Later he discharged similar duties with the 1st Reserve Brigade, Australian Artillery Camp, at Heytesbury, England.

After the signing of the armistice, Archibald Gladstone Corbett elected to remain in England for the purpose of post-graduate study. During the greater part of the nine months spent in this way, he held the appointment of Senior Resident Physician to the Prince of Wales Hospital, London.

Archibald Gladstone Corbett was deservedly popular among his contemporaries, by whom he was affectionately known as "Budge"; in his college days he was a prominent footballer and oarsman, but his work was always his first interest. He was cut off at the outset of the career for which he had shown great enthusiasm. His untimely and tragic end has been a great shock to his colleagues and friends. The medical profession sympathizes deeply with his relatives in their great sorrow.

THE AUSTRALASIAN MEDICAL CONGRESS.

Sir: In the issue of *The Medical Journal of Australia* of August 14, 1920, p. 159, col. ii., the following passage occurs:—

The Federal Committee of the British Medical Association in Australia is prepared to carry on a British Medical Association Congress, should Congress determine to wind up and to hand over its assets for this specific purpose to the Federal Committee.

The latter part of the statement is incorrect and, so far as I know, without authority.

The resolution of the Federal Committee, as published in *The Medical Journal of Australia* of February 14, 1920, p. 158, col. ii., reads as follows:—

That steps be taken by the Federal Committee to organize British Medical Association Medical Congresses, to come into operation upon the winding up of the Australasian Medical Congress, such Congresses to be undertaken by the Federal Committee on behalf of the Branches in Australia collectively, the New Zealand Branch being invited to co-operate.

You will note that the Australasian Medical Congress, in the event of its winding up, is free, so far as the Federal Committee is concerned, to do what it likes with its assets, and that the proposal of the Federal Committee to organize medical congresses, when the field is clear for it to do so, is not dependent or in any way conditional on the Australasian Medical Congress handing over its assets to it for the purpose.

Yours, etc.,

ROBT. H. TODD.

Northfield Chambers,
Phillip Street, Sydney,
August 13, 1920.

PULMONARY AFFECTIONS IN MINERS.

Sir: In reference to your leading article in the *Journal* of July 24, 1920, I would refer you to Haldane's latest work in

connexion with inhalation of coal dust or shale intermixed with silica and silicates. Perusal and study of this work will well repay anybody who is interested in the health of underground workers.

My interests lie in Broken Hill and I am, therefore, constrained to correct the statement (which was apparently heedlessly made) in the leading article mentioned, that: "In actual figures we find that 17.5% of the workers suffer from pneumokoniosis within thirty years of starting underground work."

There were examined by the Technical Commission of Inquiry altogether 4,000 men, at least half of whom were working as miners when the strike began and of whom many more had at some time or another worked underground. Of the men with mining experience in Broken Hill only, 68 were found to be suffering from fibrosis or pneumokoniosis with or without tuberculosis; 17.5% of the men working underground would mean at least 350 sufferers and that to those who know Broken Hill is absurd. These figures (68), although they show the number of men suffering from fibrosis or pneumokoniosis directly due to Broken Hill conditions, do not give the actual incidence of those affections. The only way to find this out is to carry out recommendation No. 7, as suggested by the Commission, that is, periodical examination of all men employed by the mining companies.

In the report of the Commission a statement is made that: "During the period from May, 1917, to June, 1920, no less than 215 miners died from pulmonary complaints, excluding acute pneumonia."

How did the Commission arrive at this figure?

I have examined records supplied by the Secretary of the Broken Hill and District Hospital and find that, excluding acute—which I take to mean lobar—pneumonia and, of course, pneumonic influenza, there died in the Broken Hill Hospital for the period from June 1, 1917, to June 30, 1920 (that is, 37 months), the following mines employees, both underground and surface, viz.:

Fibrosis	3
Asthma, Bronchitis, etc.	7
Pulmonary Tuberculosis	13
Total	23

During the period there died in the hospital from all causes 185 mines employees.

The official record of all deaths of mines employees, miners, labourers, etc., which have occurred in Broken Hill for the same period supports the above figures. This record, excluding acute or lobar pneumonia and pneumonic influenza, gives the following:

Causes of Death.	
Fibrosis	6
Asthma, Bronchitis, etc.	22
Tuberculosis of Lungs.. . . .	62
Total	90

The record states in regard to occupation that the deceased was a miner, a labourer or specifically mentions what his labour was, but many labourers, no doubt, were employed elsewhere than on the mines, but wherever the record stated labourer I have included him as a mine worker.

The number of miners who died from pulmonary complaints, including acute pneumonia and pneumonic influenza, was 126 for 37 months.

The number of females over 17 years of age (none of whom are employed on the mines, except here and there as typists) who died from pulmonary complaints for the last 20 months are:

Pneumonia	17
Tuberculosis of Lungs.. . . .	14
Other Pulmonary Diseases.. . . .	26
Total	57

These, if averaged, for 37 months would total more than 100, as compared with 126 miners, so that the industry, after all, cannot be such a life-destroyer as some would like to make it out to be.

The following figures, also taken from the official records, may also be of interest, as it shows the average age at death of all mines employees who have died in Broken Hill for the period June 1, 1917, to June 30, 1920:

Cause of Death.	Age at Death.
Acute Pneumonia	46.0 years
Fibrosis	51.6 years
Asthma, Bronchitis, etc.	60.0 years
Tuberculosis of Lungs.. . . .	46.0 years
Pneumonic Influenza	43.5 years

The above figures, which I can guarantee as correct, prove that the mining industry in Broken Hill is not a very dangerous one. Given proper provision and regulations regarding the same and strict enforcement, fibrosis and plumbism could, in my opinion, be practically eradicated, so far as this field is concerned.

Yours, etc.,

G. M. HAINS, M.B., B.S.

Medical Hall Chambers, Argent Street, Broken Hill,
July 30, 1920.

[We would call attention to the fact that our correspondent's deduction concerning the number of persons who become affected by pneumokoniosis after working for thirty years or more underground, is inadmissible. The total number of men employed for this length of time was not 2,000. It was considerably less than 100. We are further informed by the Technical Commission of Inquiry that the deaths from respiratory disease include not only those of miners who died at Broken Hill, but also all mines workers who had worked at Broken Hill but who had died elsewhere.—Ed.]

"PULLING TOGETHER."

Sir: It may interest many of your readers, besides Dr. Morgan Richards, to know that the verses quoted by him in the *Journal* of August 7 are really a somewhat incorrect version, probably modified by oral transmission, of the following lines:

When danger looms and death is at the door,
God and the doctor we alike adore.
The danger past, both are alike required;
God is forgotten and the doctor slighted.

These lines, again, are a modern adaptation of a medieval Latin quatrain of hexameters, which runs thus:

*Tres medicus facies habet; unam, quando rogatur,
Angelicam; mox est, ubi curat, ipse Deus.
Post, ubi curato poscit sua præmia morbo,
Horridus apparet, terribilisque Sathan.*

There is an old English translation of the same lines, which may commend itself by reason of its quaint phrasing and antique spelling:

Three faces the Phisition hath;
First as an Angell he,
When he is sought; next when he helpes,
A God he seemes to bee.

Then last of all, when he hath made
The sick deseased welle,
And asks his Guerdon, then he seemes
Ane oughlie Fiende of Helle.

You may perhaps think it worth while to reprint these scraps of verse.

Yours, etc.,

D.G.

August 11, 1920.

Proceedings of the Australian Medical Boards.

NEW SOUTH WALES.

The undermentioned has been registered, under the provisions of the *Medical Act, 1912 and 1915*, as a duly qualified medical practitioner:—

Jack Dudley Maude, Esq., Mast. Surg., 1920, Univ. Sydney.

The following additional qualifications have been registered:

Hugh Maxwell Armstrong, Mast. Surg., 1920, Univ. Sydney.

Carl Russell Furner, Mast. Surg., 1920, Univ. Sydney.

Walter Jaques Stack, Mast. Surg., 1920, Univ. Sydney.

William Herbert Ward, Mast. Surg., 1920, Univ. Sydney.

VICTORIA.

The undermentioned has been registered, under the provisions of Part I. of the *Medical Act, 1915*, as a duly qualified medical practitioner:—

James Augustus Wall, M.B., B.S., Melb., 1918, "Merton," North Road, Gardenvale.

The following additional qualification has been registered: Leonard Bell Cox, M.R.C.P., Edin., 1919, M.D., Melb., 1920.

The name of the late Archibald Gladstone Corbett has been removed from the Register.

Medical Appointments.

Dr. Thomas Butler (B.M.A.) has been appointed Government Medical Officer at Bombala and Dr. H. H. Holland (B.M.A.) at Cobar, New South Wales.

For the purposes of the *Factories and Shops Acts*, Dr. Stanley Cochrane (B.M.A.) has been appointed a Certifying Medical Practitioner at Mitcham, Victoria.

The appointment of Dr. A. Ray Southwood (B.M.A.) as Assistant Bio-Chemist and of Dr. William Ray (B.M.A.) as Honorary Assistant Physician to the Adelaide Hospital, is announced in *The South Australian Government Gazette*.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xiv.

University of Sydney: Chair of Surgery.

University of Sydney: Chair of Physiology.

Fiji Service: Medical Officer (female).

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phoenix Mutual Provident Society.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Institutes or Medical Dispensaries, Manchester Unity Independent Order of Oddfellows. Ancient Order of Foresters. Hibernian Australian Catholic Benefit Society. Grand United Order of Free Gardeners. Sons of Temperance. Order of St. Andrew. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Cloncurry Hospital. Stannary Hills Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.)	All Contract Practice Appointments in Western Australia.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

Aug 25.—Federal Committee of B.M.A. in Australia, Brisbane.
Aug 25.—Vic. Branch, B.M.A., Council.
Aug 26.—S. Aust., B.M.A..
Sept. 8.—Vic. Branch, B.M.A..
Sept. 9.—N.S.W. Branch, B.M.A., Last day for nomination of two Candidates for election to Federal Committee.
Sept. 10.—N.S.W. Branch, B.M.A., Clinical.
Sept. 10.—S. Aust. Branch, Council.
Sept. 13.—Tas. Branch, B.M.A..
Sept. 15.—W. Aust. Branch, B.M.A..
Sept. 16.—Vic. Branch, B.M.A., Council.
Sept. 21.—N.S.W. Branch, B.M.A., Executive and Finance Committee.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney. (Telephone: City 2646.)